

WHITHER AID, WHITHER DEVELOPMENT

by

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INTRODUCTION

The theme of the development of the countries has been examined during the last decades with different approaches, some of them with partial views, and in many cases, emphasizing the merely physical or material aspects of development, without making explicit the human, social and cultural aspects, or even worst, without keeping in mind these latter aspects, as a frame which is necessary for a proper approach to development.

Within the process of reflection on the subject of development, it is necessary to consider new forms of approaching it, which may allow amending or re-orientating the paths which have been followed in the immediate past, taking advantage of the experiences. It is demanded that the development process be examined with humanistic, pluridisciplinary, integrated criteria. Humanistic, in the sense of considering the human being as an actor and beneficiary of development, as an individual and as a social being; pluridisciplinary, to keep in

mind the points of view of the scientists, in the natural and social branches of science, technologists and representatives of the various forms of culture; and integrated, to seek the necessary balance towards the satisfaction of the basic needs, both material and spiritual, within the necessary consideration of human and social principles, admitting the considerations and orientations of the different disciplines.

The efforts for the development of a country can be seen within two basic components: the self-effort, which is oriented towards the preparation of its plans, programs and lines of action, using its resources towards the chosen priorities; and the so called "external aid", that is sought or offered, as a complement to the self-effort. The present study will be concentrated particularly on this latter component, since it is the subject which has been given to us. And among the different forms of the external aid, there will also be a concentration on the field of science and technology, being this our major field of studies, although other forms are considered from an analytical angle. Equally, a slant may be found towards Latin America, the geographical zone which is better known to us.

In any case, we want to see the external aid as a real help for development, that is to say, that development must prevail over aid, and that the latter has to be a support for the plans, programs, and lines of action that a country may determine, within a desirable and feasible autonomy.

Notwithstanding the concentration which is outlined here, it will be necessary to deal with some backgrounds which condition the external aid, particularly in the political and economical aspects. Equally, we consider its dimensions, institutional forms and modalities, to finally present some criteria which we hope may orient towards a better external aid.

Several background cases.

The world politics orient the methods used in the countries' relations and thus, influence the external aid. With respect to this, a transcendental fact which must be mentioned is the creation of the United Nations Organization, UNO, in 1945, after the Second World War, "to preserve the future generations from the scourge of war", but at the same time, with objectives such as those we mention below, since they have a direct relation with the subject we are engaged in, extracted from the United Nations Charter (1):

- . "The reaffirmation of the faith in the fundamental rights of man, in the moral esteem and value of the human being, in the equal rights of men and women and of the big and small nations";
- . "The promotion of social progress and the furthering of the living standard within a wider concept of freedom";

- . "The use of an international mechanism for promoting the economical and social progress of all nations";
- . "The furthering of the international cooperation in solving international problems of economical, social, cultural or humanitarian character and in the development and stimulation of the respect of the human rights and the fundamental freedoms of everyone".

The UNO, through its Organization, has brought forward, from the beginning, activities which are within the external aid in the development field. Thus, its Principal Agencies, among which there is the General Assembly, the Eocnomical and Social Council and the Secretaryship, have been engaged in the subject and have given bearings to worldwide level activities, which are performed and complemented with action, within the United Nations' System, of the Intergovernmental Specialized Agencies, such as ILO, FAO, UNESCO, WHO, among other,- and of the Regional Economical Commissions-, such as CEPAL for the Latin American and Caribbean region.

Beside the action at the worldwide level, it is worthwhile to outline the efforts made at a regional level. To illustrate this action, we will recall the labor in Latin America and the Caribbean, through the Organization of American States, OAS, particularly with its Regional Program of Scientific and Technological Development, PRDCT. Through such program, from the

decade of the 1960's an intra-regional cooperation movement has been produced, complementing the participation of other international agencies, which have undoubtedly contributed to start a series of important actions in the scientific and technological field, tending to their connection with development, both in the scope of the member countries, and in the scope of the whole region.

Another important example at the regional level is that of the "European Community", which offers programs, not only of cooperation among the member countries, but also towards the third world countries, although with a great compromise to the nations which were old colonies of the associated countries.

It is also worthwhile to remember that blocks of countries have been formed at the sub-regional level, which have worked in the scientific and technological field and in the aid for development. Again, with reference to our American continent, there is the outstanding example of the countries of the so called "Andean Group" (formed by Bolivia, Colombia, ^{Ecuador} Peru and Venezuela), which, through the Agreement of Cartagena, signed by the above mentioned five countries, have established cooperation mechanisms among the member countries, and with intermediation before the international agencies.

The countries themselves, within their international policies, particularly the developed countries, include the external

aid as one of the mechanisms which orient their relations with other nations, to strengthen their action in other fields.

The mention of the former examples, as a background, has been done with the purpose of showing the various forms of relation between the countries, but at the same time, to outline that the political relations which govern our present world, do condition the external aid. Thus, we can see how, in such relations, different blocks are being formed which acquire definite implications, and which are modeling the forms of conduct. In this sense, one may remind the East and West blocks of countries, beside the two Great Powers; or the North and South blocks, to outline the relations between the developed or industrialized world and the developing world or the Third World countries. Such blocks have influenced the orientation of the international agencies which govern our relations, and the modeling of the external aid schemes.

Beside the influences of political character, there also appear the factors of economical character which bear conspicuously upon the relations between the countries, as well as in their development and in the external aid. In this sense, it is enough to quote such aspects as the external debt, the international trade of primary products and the interchange terms.

As to the external debt, which in the Latin American case reached an amount higher than 410.000 million dollars at the end of 1987, in order to serve its amortization installments and

their corresponding interest, the countries have to destine a high percentage of their exportation profit, reducing in this manner the foreign currency availability for their own economical growth and the subsequent development.

During the last years there have also been problems with the commerce of primary products, which are the main foreign currency source of the Third World countries. On the one hand, restrictions to importations have appeared in the industrialized countries, and on the other hand, relative consumptions are reduced due to sparing or substitution of materials, besides the reduction in their prices. All the above mentioned gets the interchange terms to weaken for the countries exporting primary products and importing materials, such as machinery and equipment which are necessary for their growth and development.

As an expression of the importance of the commerce and development problems, the United Nations Organization created the United Nations Conference on Trade and Development, UNCTAD, which has been meeting periodically since 1964, and in which the problems of the North - South relations have been discussed, particularly those relating the international economic order, such as the above outlined, including the cooperation for development, and proposals have arisen towards a new international economic order, such as those which have been presented to the General Assembly in 1974, which lead to the "Declaration on the Establishment of a new International

Economic Order", and later, to the approval of the "Economic Rights and Obligations Chart of the States". The Trade and Development subject has continued to be discussed in the subsequent UNCTAD meetings, looking for the so much yearned improvements in the economical relations between North and South.

In summary, and to finish this quoting of some background cases in the political and economical aspects which condition and orient the external aid, it is worthwhile to outline the prevailing role played by them and which sometimes may lead to the reduction, or even the annulment of the positive effects of the external aid.

The raison d'etre of the external aid

By examining the reasons which motivate the external aid, we may identify at least the following: ethical, humanitarian, political, economic and social reasons.

The ethical reasons pledge not only the individuals but their organizations and even the countries. When the development aspects are considered, the deficiencies, such as poverty, ignorance, diseases, and malnutrition, among others, may be identified at a worldwide level, in front of abundance, wealth and better health conditions in the development world. Great differences are thus established which motivate the appearance of an interest which is common to all human beings, beyond the

local and national interests, towards a feeling of solidarity, with moral reasons which move mankind to look for the disappearance, or at least the relief of that evils which hurts a greater number of the population in the underdeveloped world. These ethical reasons could be considered as "the ideal" reasons to promote the external aid.

Beside the ethical reasons, we have also mentioned the humanitarian reasons in a separate form, although in their basis they are also ^{based} ~~fundamented~~ in moral reasons, to emphasize the international type movements, particularly in non-governmental scope, to serve disasters or catastrophes caused by the action of nature or man, which involve great quantities of people in front of their disability or that of their governments to take care of the emergency situations to which they are faced. There are a number of organizations, both of civil and of religious type which, with a humanitarian motivation, are always ready to help in extreme situations.

The reasons of the political type, move countries or groups of countries to influence other countries or regions, with their power expressed through the ways of external aid, with which their presence is managed in their zones of influence, as an expression of friendship and support. The external aid is always included within the countries' foreign policies, particularly in the developed countries, as one of the mechanisms to maintain relations with other states.

Beside the political reasons, we mentioned the economic type reasons. The countries always have interdependence relations with others in their economic aspects, be it due to interchange of raw materials or basic products, or of manufactured products, within the international trade. This compels them to maintain good relations with those providing raw materials, or which are an obliged market of the finished products. Thus, the economic aspects constitute a fundamental component of development.

Finally, we mentioned the social type reasons, insofar as, the desired end that is to be reached, is an improvement of the human being, as an individual and as a member of the social order. The countries that grant the aid, pretend that better international relations be reached with the support of the improvement of social conditions.

Indeed, it is advisable to add that the above separation scarcely responds to an analytical exercise. In the practice, the various forms of the external aid bear a multiple content of motivational reasons, with the predominance of one or another, as the case may be. It is worthwhile to carefully examine when the external aid is negotiated, being aware of what it is more convenient to the national purposes.

The geographical dimensions of the external aid

To examine such dimensions of external aid, we start at the local level, then we move to the national level; from there we continue to the sub-regional level, regional and global or international level, illustrating each level with relevant examples.

We consider, in the first place, the local level, since there is where the action occurs and where the external aid must arrive, that is to say, it is its raison d'etre. In questions of science and technology, at the local level a minimum infrastructure is required, so as to manage that the external aid may be duly embodied to the their own capability, and may be assimilated and directed towards the object of development. The direct action of the external aid without any local intermediation is not justified; it may develop as a foreign body among the social organism. On the other hand, the aid which complements or enhances the local capability is the correct way which tends to eliminate or reduce the external dependence, or go into more complex actions.

The national level, as the sum of the different local level actions, is handled as a whole in each country. A national science and technology entity usually exists, with diverse locations and different functions. In general, such entity accomplishes the tasks in the field of science and technology policies, in accordance with the economic and social development; in order to accomplish such task, it may exert the

functions of planning, coordination between the government, the scientific and technological system and the production sector, and of promotion of the science and technology activities, including financing. The external aid must be included within the elaboration of the scientific and technological development plans and programs, and the national science and technology entity must take part in the negotiation and coordination processes of aid, particularly with intergovernmental agencies.

At the sub-regional level, interesting forms of external aid and cooperation are outlined. As it has been already mentioned in the background, as an example of action at this level, the case of the so called "Agreement of Cartagena" has been mentioned, which assembles a group of countries of the South American continent, those pertaining to the so called "Andean Group": Bolivia, Colombia, Ecuador, Peru and Venezuela. These countries began in 1969 an ambitious integration program, from the signature date of the Agreement of Cartagena, which has had problems and achievements. Within such integration process, the scientific and technological development subject has been of special concern, with stages like the investigation and analysis of technological problems, the formulation and adoption of a sub-regional technological policy and the partial performance of such policy.

At the beginning of the decade of the 1980's, a revision and evaluation exercise of the integration process was initiated, to arrive, in 1983, to the formulation of a "Reorientation Plan of the Andean Integration Process" that seeks, among other things, "a systematic exercise of the external joint action capability of the Member Countries". Such plan defines eight sector strategies of action in priority areas, one of which is the "Andean Strategy of Science and Technology". (2) In the development of this action, progress is made in the harmonization, arrangement and joint programming of Andean scientific and technological activities. In this way, and facing common needs, the creation of a sub-regional scientific community, is being intended, which may allow a better use of the existent resources, being at the same time a mechanism to reach the international cooperation. Thus, this is a resort to be considered in external aid actions.

At the regional level, it has already been outlined as one of the examples, the role of the Organization of American States, OAS, particularly with its Scientific and Technologic Development Regional Program, PRDCT. Such program has been a discussion forum of very different subjects. Within the numerous meetings the PRDCT has promoted, it is worthwhile to outline the Specialized Conference on the Application of Science and Technology to the Latin America's Development, CACTAL, held in Brazil in 1972 (3).

This conference fixed important action bearings, which oriented both the member countries and the organization itself, in scientific and technical cooperation matters.

Need → The other example of regional character is that of the European Community. As above mentioned, the external aid of this group of European countries has been characterized by a marked regional concentration, which includes its old colonies in Africa, the Caribbean and the Pacific sea. Politically, this is concreted in the so called Agreements of Lomé, which include cooperation aspects of financial, economic and commercial type, in addition to the technical assistance for the so called "associated countries". Latin America and the Caribbean remain in the *SP* "associated countries" category, and this is a minority region in the reception of financial and technical assistance, in addition to its facing of discriminating situations in international trade matters. The principal Latin American receiving countries have been the Central American countries and the Caribbean, as well as the Andean group in the industrial development projects' field.(4) At the international level, as above mentioned, the role of the United Nations Organization, (UNO), through all the system's agencies, is outlined.

As a matter of fact, the Extended Program of Technical Assistance was established, and later the Special Fund was created, which was transformed into the United Nations Development Program, UNDP. , .

At the beginning of the 1960's the United Nations' General Assembly declared the current decade as "the United Nations Development decade, in which Member States and their people will intensify their effort to mobilize and sustain support for the measures required on the part of both developed and developing countries to accelerate progress towards self sustaining growth of the economy of the individual nations and their social advancement". (5)

At the beginning of the 1970's, the launching of "the second United Nations Development Decade" was done, based on the examination of the proposals for the action in the first decade, the realizations and frustrations. For this second decade, a great role was given to science and technology, having qualified its participation as "the great experiment". (6)

Throughout these two decades, programs were carried on in priority areas, with the participation of the member countries and important international meetings were held. It is worthwhile to mention, among these, the UN Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, UNCAST, held in Geneva in 1963. As a consequence of this Conference, the UN Advisory Committee on the Application of Science and Technology to Development, ACAST, was created, which in its turn originated the World Plan of Action, which "provided the major scientific input to the UN plan for a Second Development Decade".

In the 1970's decade, a series of Specialized Conferences were held, relating the new Development problems, such as: The United Nations Conference on the Human Environment, Stockholm; the Conference on Population; that of desertification; Habitat; the Conference on Food; that of Water; the Cycle is closed at the end of 1979, with the United Nations Conference on Science and Technology for Development, held in Vienna, which mobilized a wide participation.

All these conferences have set bearings which have been adopted by the different specialized agencies, as well as by the United States Program for Development, to channel their actions in the 1980's, according to the available financial resources.

Institutional Forms of the external aid.

Nowadays there are very different forms of external aid, which may be characterized according to the type of institutional mechanism which propitiate it.

Indeed, the first communication form between scientists and technologists, which propitiate the mutual aid, keeps on being the personal, direct communication, without any intermediation.

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Futhermore, one may distinguish between the aid which is promoted by governmental agencies -by formal agreement between entities of the governments- and that which is developed by way of the so called non-governmental organizations, NGO. Equally,

particularly in the aid between governmental entities, the bilateral and the multilateral aid can be characterized.

Recently, a new type of aid has been institutionalized, which occurs among the developing countries, face to the North-South classical forms, and which receives different names: technical cooperation between developing countries, TCDC, horizontal cooperation, or South-South cooperation.

We will extend the above mentioned forms, as follows:

The personal communication among scientists, is the oldest international relation form, which has permitted the information exchange on investigation methodologies and results. Of course, nowadays it has been activated through the scientists' matches, during the meetings which are promoted for different reasons. Equally, the personal knowledge may induce and make easier the appearance of institutional cooperation forms.

The aid by the governmental ways in science and technology matters, may be considered as a relatively recent phenomenon, which has been strengthened after the second World War. All the examples that have been presented in former paragraphs, show the institutionalization process of such aid in the national, sub-regional, regional and worldwide orders, as a complement to political or economic type reasons. In this way there appears an appreciable number of intergovernmental organizations with various grades of geographical and thematical coverage.

In a parallel way, a greater number of the so called non Governmental Organizations, NGO, have been organized. An important group is constituted by the Scientific Associations and the Academies of Science, which have established more permanent relations than the simple personal relations. In their turn, the International Unions have been formed, specialized in special sciences, and which have federated themselves in the International Council of Scientific Unions, ICSU.

A wide number of Foundations, Corporations, Centers and Associations from various origins in the geographical and thematical order, and which are carrying on important external aid programs, form also part of the NGOs.

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The NGO group, which operates under the private law regime, is formed by entities which are in general non profit organizations, and present the advantages of their independence, action flexibility, few bureaucratism and, consequently, more effectiveness and efficacy, compared with the governmental agencies. In many programs and activities, the NGOs become support entities for the governmental agencies. At the international level, for example, in the ICSU's case, it has been "Acknowledged by UNESCO as the international agency which is competent to represent the scientific unions and coordinate their works" (9). Other Organisms of the Nations' system, as the UNESCO does, apply the acknowledgement mechanism of the NGOs as cooperative bodies in the performance of their activities.

The other dimensions ^{has} which ~~have~~ been already mentioned, ~~is~~ that of bilaterality or multilaterality, specially within the governmental agencies.

The external bilateral aid is agreed by the concerned parties. In general, it has existed between a developed country, which acts as donor, and a developing country, which acts as receiver of the aid, - thus constituting itself a transference mechanism of the scientific and technologic capabilities of the more developed countries, to countries or institutions of less relative development. In the industrialized countries, specialized agencies have been created, such as AID of the USA government, CIDA, of Canada, JICA, of Japan, GTZ of the Federal Republic of Germany. Such agencies fix the orientation of the aid, as to the fields to be covered, the countries or institutions to be selected, the priorities and forms of presentation. The former gives the bases for the negotiation with the receiver countries.

There are some institutions, which may be considered as semi-state entities, in which, even though financing is received from the government of the corresponding country, its handling is done with a certain grade of independence from such government. A typical example is the IDRC of Canada, entity which has introduced new cooperation forms, without the marked dependence that generally characterizes the direct governmental aid.

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The multilateral aid comes from international agencies, formed by a group of countries or organizations, either intergovernmental or of private nature.

Within the intergovernmental agencies, the specialized organizations of the United Nations' System are included, such as UNESCO, FAO, WHO, UNIDO, UNDP. Equally, regional or sub-regional institutions, such as OAS and JUNAC.

A special case that must be mentioned is that of the International Centers for Agricultural Research 13 in total, created from 1960. Three of them are located in Latin America: the CIMMYT, International Center for the Improvement of Corn and Wheat, in Mexico; the CIAT, International Center for Tropical Agriculture, in Colombia; and the CIP, International Center for the Potatoe, in Peru. In 1971 was created the Consulting Group on the International Agricultural Research , CGIAR, as "an informal association, without any bylaws, of independent donors, who finance bilaterally 13 international research centers, which are only responsible before their independent directors" (7). The world Bank, UNDP and FAO, and a group of donors, formed by countries, regional and international organizations and public and private institutions, are the Group's sponsors.

The International Centers contribute with the results of their investigations to the national research programs, which

perform the adaptation and the subsequent transference to the farmers.

Let us consider, finally, the cooperation between developing countries, TCDP, or horizontal cooperation.

It is worthwhile to outline that it has existed in a formal and informal way, through different mechanisms and programs, such as those existing within the regional organizations such as OAS and JUNAC. The Multinational Projects of the OAS in various areas of Science and technology, have promoted important relations among the Latin American and Caribbean countries. The Andean Programs of Technological Development have played a similar role among the countries forming part of the Agreement of Cartagena.

However, the TCDP, impelled also by the United Nations in the 1979's, acquires its present status from the United Nations Conference on TCDP, held in Buenos Aires in 1978. In it, the "Action Plan" was elaborated, which was later approved by the United Nations General Assembly, and contains a series of recommendations which form the worldwide frame for the South-South cooperation.

In such Action Plan, is declared as main object, (8)

"to foster the developing countries' capability to use their own means, by increasing their creative ability to find solutions to the development problems, according to their own values, inspirations and special needs".

Furthermore, it is declared that

"the TCDP must promote and strengthen, in the developing countries, the joint capability to use their own means, by exchanging experiences, sharing and using their technical resources in a combined form, and developing complementary abilities".

It is also outlined that:

"The TCDP is not an aim by itself, nor a substitute of the North-South cooperation. Rather, it is acknowledged that it adds a new dimension to the global quantity and quality of the assistance for development".

The United Nations General Assembly appointed the UNDP as the coordinator entity for the TCDP promotion and support among its own system. But, of course, the main role corresponds to the developing countries themselves. This does not exclude the support of the governments of developed countries, as well as of other intergovernmental and non-governmental organizations.

It is advisable to note that in the Latin America and Caribbean region several bilateral agreements of cooperation in science and technology have been established, which are administered in general by the National Organisms of Science and Technology, which allow exchange actions among the signatory countries of each Agreement.

The external aid modalities.

By examining the historical process of the external aid, we could distinguish the following modalities:

- . The Technical Assistance
- . The Advisory
- . The Technical Cooperation
- . The Transference of Technology
- . The Economic and Financial Aid

In the Technical Assistance there are programs that may be considered as one-way programs, to the effect that a donor and a receiver are established, and the relationship is, basically, from the donor towards the receiver. In the classical forms of technical assistance, blocks are established which include short and long duration expert services, coming from the donor country or institution; formation and training scholarship services for the receiver country's personnel; Equipment and supply service; and information and bibliographic material services.

When specialized services are required that may not be found in a developing country, one has recourse to the International Advisory to request for, or to contract with persons or institutions such services which in general respond to punctual reference terms, and that tend to the diagnosis or search of a concrete problem solution, without specific objectives of the local capability improvement.

In the Technical Cooperation, it is endeavored to manage the formulation and execution of real cooperative programs or projects, in the meaning of a mutual collaboration, of a joint work, with benefits for the concerned parties, with interaction (that is to say, double-way action), face to the technical assistance or the advisory (single-way action). The true cooperation actions generally require medium and long term periods for their consolidation. The forms of execution depend on each project characteristics and on the cooperating institutions, requiring a careful planning and joint administration work.

We have left as a separate modality the Transference of Technology, to characterize it according to its own peculiarities. Of course, in the other modalities the function of transference of knowledge is accomplished, and in some cases, also that of transference of technology; but it is worthwhile to outline other forms also.

We refer, particularly, to the technology which is required in the production of goods and services, in which, in the developing countries, prevails the practice of their purchase to the developed countries, in an imperfect market in which, who sells technology has the control, and imposes the negotiation conditions.

Finally, the Economic and Financial Aid is considered. We distinguish between the economic aid, to refer ourselves to the aid which is granted in capital, as a gift, or in a non-reimbursable form, and the financial aid, which is granted in the form of a reimbursable loan.

The donations come from bilateral or multilateral organizations, both of the public and the private sectors, and are oriented towards projects or programs in which convergence is found between the donor organism priorities and those of the beneficiary country or institution.

The financial aid is led by the development banks, among which we may mention the International Bank for Reconstruction and Development, or World Bank (WB). Equally, there are the regional development banks, for the African, and Asiatic continents and the Latin American sub-continent, the Interamerican Development Bank, IDB. We must mention that the IDB in the last decades, has promoted a credit program in the region, oriented towards the scientific and technologic development of the countries, among which we can mention Brazil, Mexico and Colombia.

By way of synthesis.

From the examination of the situation in the last decades, an evolution in the two notions can be seen: that of development and that of the aid for development.

As to development, from an initial conception of the simple economic growth, and from a separation between the economic and the social matters, there has been a progress towards the improvement of the concepts of quality of life and quality of the society, looking also for a real synthesis of the economic and the social matters. Indeed, there must be a much greater progress towards the integral, humanistic development concept, with man as an agent and as the aim of development, valuating even more the cultural concepts of people, tending to the organization of their own, authentic, and autonomous development.

The aid for development has also evolved, to go from orientations to projects, to the planning action towards programs, with a prospective character; from the aid by transference of ideas, knowledge, equipment and capital, to a better established aid in the organization of the self-effort, with simultaneous actions in the formation of personnel, the establishment of structures and in the investments themselves.

The modalities of aid have passed from the technical assistance towards the technical cooperation and the financial aid.

The institutional schemes have proliferated, both of governmental and non-governmental nature.

SP But during the last years, disturbance factors of the development process have also appeared, particularly of political and economic nature, which reduce, or even eliminate the beneficial effects of the aid for development.

As a consequence of this process, in spite of the fact that several countries have obtained progress, and among other, certain population sectors have reached better living levels, however, in general, in the developing countries a great social burden is supported, due to poverty, ignorance, diseases, malnutrition, unemployment, accompanied with a growing environmental impairment.

All the above must lead us to reconsider and restate the development strategies, the actions and means to reach it, as well as the external aid orientations, within a true universal and human solidarity meaning.

Several criteria for a better external aid

Finally, we wish to summarily present several criteria arisen from this paper, and which may serve as reflection points to seek the optimization of the external aid for development.

1. The integral development concept is reaffirmed, in the sense of considering not only the physical and material aspects, but also the human, social and cultural ones, the latter

particularly as a necessary frame for a proper view of development.

On the other hand, for the adequate analysis of the development process, it has to be done in a pluridisciplinary form, taking into account the points of view of the scientists in the natural and social sciences branches, in an integrated form towards the aim of development.

2. It is required to persist exerting planning, as an indicating element of the organized action, in the development of orienting policies and strategies. Of course, planning must not become a strait jacket, but must be a dynamic and flexible process, subject to periodical evaluations and reviews.

In scientific and technological matters, planning must be oriented towards the medium and long term, that is to say, with prospective elements which may allow to examine trends with future focuses, as to the needs and the possibilities to solve them, in order to manage that science and technology be real support elements to the development process.

5p 3. As to the efforts for development of a country, the national action must outweigh. The external aid must be a complement, and not a substitute for the own action. That is why, in the plans and programs the actions in which the external aid is an essential requirement must be considered. In this way a catalog

of needs may be available, which will allow and adequate search and negotiation of the external aid.

Of course, for the attainment of a national action, the strengthening of the scientific and technologic infrastructure is required, with its components of human, physical, information, communication, financial and institutional resources. This strengthening action is a permanent, long term process, which requires considerable investments.

4. It is necessary to overcome the conception of donors and receivers to attain that of real partners in the development enterprise, with joint, coordinated and shared actions, tending to the true solution of the problems, under the principle of a real international solidarity. The former must lead us from the technical assistance (single-way), to the technical cooperation (double-way action), with an adequate joint planning, programming and administration.

5. The proliferation of international mechanisms for external aid is bothering, since in some cases they dilute and complicate the internal effort. Thus, it is required, at a national level, a proper review and coordination which may allow to arrange the participation in the^{inter}national programs.

6. With respect to transference of technology, its displacement must be oriented from the simple adoption, to its adaptation and assimilation. The formation of national bodies with the ability

to search, evaluate, and negotiate the technology to be embodied in the developing countries, is an essential requisite to obtain an adequate technological development and to involve the national capability into a more active role in the creation of own technology.

7. The strengthening of the technical cooperation among developing countries, TCDP, must be extended, that is to say, the South-South action, as a complement for the North-South action. This form of cooperation must lead to continued action programs, with institutional and financial support permitting an integration and complementation of efforts.

8. The financial aid programs by means of loans, represent an advancement stage in the external aid process, and contribute to the consolidation of the scientific and technologic infrastructure, deferring to long term the amortization of their financing. They serve, equally, to involve important compensation national funds. However, they come to increase the external debt, with all the consequences such increase bears.

9. An evaluating effort of the successful external aid programs is necessary, to obtain from them the forms, mechanisms and bearings towards the future. The results from such evaluations must have a wide spreading among the various organizations and countries.

= R E E E R E N C E S =

- 1.- NACIONES UNIDAS. ABC de las Naciones Unidas. New York
- 2.- Junta del Acuerdo de Cartagena." Estrategias para la Reorientación de la Integración Andina-Ciencia y Tecnología". Lima, 1983
- 3.- OEA, Conferencia Especializada sobre la Apliación de la Ciencia y la Tecnología al Desarrollo de América Latina, CACTAL. Informe Final, 1972
- 4.- D+C. Desarrollo y Cooperación, No. 2, 1988
- 5.- UNITED NATIONS. The United Nations Development Decade - Proposals for action. Report of the Secretary -General. New York, 1962
- 6.- CLARKE, Robin. "The Great Experiment Science and Technology in the Second United Nations Development Decade". United Nations, New York, 1971
- 7.- MOSCARDI, Edgardo. "El Sistema Grupo Consultivo sobre la Investigación Agrícola Internacional, GCIAI".En Memorias del Seminario Internacional sobre "Temas Prioritarios y Mecanismos de Cooperación en Investigación Agropecuaria en América Latina. CIAT. Cali, Colombia, 1986
- 8.- PNUD.-"CTPD: Ideas traducidas en acción". Dependencia Especial de CTPD, PNUD. New York, 1988
- 9.- SPAEY, Jacques y Colaobradores. "El desarrollo por la Ciencia. UNESCO, París, 1970

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