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**ANALYSIS OF THE PAHO/WHO TECHNICAL COOPERATION PROGRAM
IN PARAGUAY**

The first meeting for the Joint Evaluation of Technical Cooperation by the Ministry of Public Health and Social Welfare and PAHO/WHO was held in 1987, the second in 1990, and the third in 1994. These meetings made it possible to analyze the health situation in the country, adapt cooperation to national priorities, and determine the degree of efficiency and effectiveness of the cooperation.

The third meeting took place in Asunción, 14-15 March 1994, with the participation of Minister of Public Health and Social Welfare, Dr. Cándido Nuñez León, Assistant Director of PAHO, Dr. George A. O. Alleyne, and staff members from the Ministry of Public Health and Social Welfare and PAHO/WHO.

Technical meetings with three working groups were held to review and discuss the various cooperation projects executed in the period 1990-1993, as well as the cooperation proposals for the next quadrennium.

We submit the results of the joint evaluation to the Subcommittee for consideration, especially the Organization's future lines of cooperation with Paraguay, in order to ensure that the Organization's technical cooperation conforms to the Country's priorities.

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EXECUTIVE SUMMARY

The joint evaluation of technical cooperation by the Ministry of Public Health and Social Welfare and PAHO/WHO, which took place on 14-15 March 1994, made it possible to analyze the health situation in Paraguay and adapt current cooperation to national priorities, especially to the processes linked with the implementation of the National Health System and the decentralization of the health services.

With a view to providing the necessary information for the technical discussions, the following documents were consulted: Description of the Health Situation in Paraguay; Analysis of PAHO/WHO Technical Cooperation, by Projects; and Strategic Orientations and Program Priorities for the Pan American Health Organization during the Quadrennium 1991-1994.

The technical meetings, meetings of the working groups, and the plenary session for presentation of the final report were held on 14-15 March 1994. The meeting was opened by the Vice Minister of Public Health and Social Welfare, Dr. Andrés Vidovich Morales. Also present were the Assistant Director of PAHO, Dr. George A. O. Alleyne; the PAHO/WHO Representative in Paraguay, Dr. Armando López Scavino; the national directors of the Ministry of Public Health and Social Welfare and the Ministry of Agriculture and Livestock; a representative from both the municipality of Asunción and the School of Medicine, and PAHO consultants from Headquarters and Paraguay.

To better orient the discussions and enhance the analytical capacity of the participants, the topics were grouped as follows:

Epidemiology and Communicable Diseases

- environmental health
- veterinary public health and food surveillance

Health Promotion

- human resources development
- maternal and child health

Health Services Development

- technical cooperation among countries
- managerial process for national health development.

On conclusion of the evaluation process, with the Minister of Public Health and Social Welfare, Dr. Cándido Nuñez León, in attendance, the final recommendations were presented, and the Minister closed the meeting in the presence of Drs. Alleyne and López Scavino.

Experience with joint evaluation has shown it to be an effective instrument for assessing the quality and impact of PAHO's technical cooperation, as well as for analyzing the degree to which the technical cooperation program coincides with the country's stated priorities and with global and regional objectives and strategies. It also makes it possible to indicate the direction in which the objectives, strategies, and activities of the technical cooperation program should be aimed to meet the country's needs.

The discussions of the various working groups were largely geared toward the identification of the activities carried out during the implementation of the technical cooperation projects and their possible scope; the analysis therefore tended to be mainly quantitative in nature.

Furthermore, one of the aspects addressed by the groups in their analysis of the technical cooperation was the difficulty of identifying or measuring the real impact of the cooperation, since there are no indicators for reflecting qualitative changes in the outcomes obtained. This does not mean, however, that there were no major advances in health during the period. On the contrary, outcomes can be identified in which PAHO's participation has been responsible for changes such as:

- Incorporation of the following areas into the new Constitution: the creation of the national health system; the delegation of authority to departmental governors in areas related to health and well-being; women's health; and social and human rights;
- The National Health Council as a critical factor in supporting the implementation of the national health system and aspects related to the intersectoral nature of health;
- Decentralization, local programming, and strategic administration.

Another area of consensus among the participants was the need, in virtually all the technical cooperation projects, to continue and augment training activities for health personnel and to promote the development of the country's health research capability.

It was recognized that one of PAHO's priorities is to support the health sector in the different aspects of technical cooperation in order to improve the efficiency of interventions in the area of health.

The need to strengthen technical cooperation among the countries of the Southern Cone was underscored, especially with respect to activities in border areas.

Finally, mention should be made of the interest and the broad participation of all staff from the Ministry of Public Health and Social Welfare and PAHO/WHO in the working group discussions, and especially of the specific reports presented, which made it possible to develop concrete proposals for future PAHO/WHO technical cooperation.

1. Background

Analysis of the technical cooperation provided to Paraguay, and, more specifically, to the Ministry of Public Health and Social Welfare, in the period 1990-1993 should consider the country's rather special situation, marked by the transition toward democracy after a long period of authoritarian rule.

Among the constraints to health sector development that have been identified are: the effects of an authoritarian political culture, an extensive bureaucracy that continues to foster inefficiency and unsuitable practices, highly centralized political decision-making, and inadequate development of local administrative capacity.¹

The new types of relationships between the national authorities and the PAHO/WHO Representative Office in the initial years of this period led to a change in the way cooperation is delivered, with effective participation by the national authorities in the programming of cooperation (preparation of the APB and PTC), the opening of new areas of cooperation in health, and the participation of new counterparts who had once been virtually ignored—for example, the university, through the Research Institute in the Health Sciences; the schools of medical and veterinary sciences; the municipality of Asunción; the National Legislature; some departmental governments; nongovernmental organizations; and other institutions.

The national priorities in health have been set forth in two documents that express the point of view of the Ministry of Public Health and Social Welfare in two of the three administrations from the period 1990-1993.^{2,3}

The national priorities in health are: the creation of a national health system, improvement in the operating capacity of the services, a reduction in the incidence and prevalence of communicable and noncommunicable diseases, improvement in the status and coverage of vulnerable population groups, improvement of sanitary conditions with respect to water supply and excreta disposal, human resources development, and

¹ OPS/OMS. Salud y desarrollo en el Paraguay. Hacia un sistema nacional de salud. 1993.

² Paraguay. National Health Council. National Health Policy. National Health Plan. (1991-1993). Asunción. 1991.

³ Algunas Conceptualizaciones sobre el desarrollo de acciones dirigidas a mejorar las condiciones de salud del pueblo paraguayo. Mimeo. August, 1993.

strengthening of activities related to social well-being, in addition to increasing efforts to reduce the risk of cholera in Paraguay.⁴

In light of these national priorities and in consensus with the national authorities, the priorities for PAHO/WHO technical cooperation were defined. These include: health services development, based on strengthening the local health systems as a tool for decentralization; expansion of water supply and excreta disposal services; human resources development; human rabies control and the struggle against zoonoses; improvement of maternal and child health, with care in childbirth and care of the newborn; activities in nutrition; and control of the leading causes of child morbidity and mortality.⁵

2. Technical Cooperation in the Period 1990-1993, by Technical Area

2.1 *Development of the Health Services Infrastructure*

The key areas of PAHO/WHO's technical cooperation have been the initial development of the national health system, the development and strengthening of the local health systems, intra- and intersectoral coordination, decentralization, institutional restructuring, and improvement in the quality of health care. The Organization participated in the drafting of the constitutional articles on the national health system and instituted action related to legislative proposals on the system and the operational coordination between the Ministry of Public Health and Social Welfare and the Social Security Institute.

As a result of teamwork among the Representative Office, PAHO's regional programs, and distinguished Paraguayan professionals, a publication on proposals to develop a national health system was launched. During the period the Organization strongly supported the creation of interinstitutional entities for dialogue and negotiation. Primary health care, which is incorporated in the health care models, is still not widespread.

There has been strong backing for the development of the local health systems, with the drafting of a technical proposal, training in local programming, the design of health care models, the construction of a database for local programming, and the conceptual and methodological development of local strategic administration. In addition,

⁴ OPS/OMS. III Reunión de Evaluación Conjunta de la Cooperación OPS-PAIS. Informe final. PWR/PAR. 1994.

⁵ OPS/OMS. PWR/PAR. APB 1990, 1991, 1992, 1993.

a health and development intervention model, under the Executive Branch, has been established at the departmental level, with authority in the area of health care.⁶

The country has implemented a strategic information system to support policy-making at the national and departmental levels.

A model for comprehensive nursing care and a referral and counterreferral system are being developed. Work is also under way for the creation of a hospital accreditation system and a system to ensure the quality of the care provided.

Regulations for the registry, monitoring, and quality control of drugs were instituted, and a program of essential drugs was formulated. Action is being taken to draft laws in the national legislature, and there is an agreement between the National University of Asunción and the Ministry of Public Health and Social Welfare to perform quality control of drugs.

With regard to rehabilitation, the Organization has supported the inclusion of this topic in the Constitution and promoted prevention activities in this field; it has also launched the implementation of the community-based rehabilitation strategy (CBR), in coordination with INPRO, the Ministry of Public Health and Social Welfare, and the Bureau of Welfare of the Office of the President of the Republic, and offered training workshops on this topic.

2.2 *Maternal, Child, and Adolescent Health*

Efforts in this area have helped to reduce the overall maternal and child morbidity and mortality and change attitudes, behavior, and approaches in human resources education, through the maternal and child health care model.

The cooperation has supported the development of the National Adolescent Health Program, which has been applied in some of the health regions.

The Organization has also provided support for the National Program for Acute Respiratory Diseases, through the application of training standards and procedures at the institutional and community levels.

It has provided support for the implementation of the National Program for Control of Diarrheal Diseases, through the application of training standards and procedures for institutional and community health workers.

⁶ OPS/PAR. Desarrollo y fortalecimiento de los sistemas locales de salud. La programación como eje del desarrollo de los SILOS en el Paraguay. 1994.

2.2.1 Integration of Health Care and Education

This area, established in 1989, has included the development of norms, policies, training of human resources in rural areas, operations research, and information dissemination, with the participation of schools from the National University of Asunción and the Ministry of Public Health and Social Welfare. An internal evaluation in late 1993 revealed that the program had had an impact, manifested in a reduction in maternal and child mortality in the health regions where it was executed, the application of health care standards and models, and the extension of some aspects of the program to the rest of the country.

2.2.2 Strengthening of the National Family Health Program

The Organization has contributed to the institutional development of family planning at the level of the Ministry of Health, cooperating in the improvement of operating capacity, the organization of the department, and the drafting of national maternal and child health plans. It has provided strong support for the institutionalization of the program and the formulation of a new maternal and child health project, with the intervention of NGOs that work in the area.

2.2.3 Model Family Planning Center

A center for training in the use of contraceptives and family planning counseling was established in a health center in the Capital.

2.3 Nutrition

In coordination with UNICEF, activities have been undertaken in the Program for Control of Endemic Goiter, through training and the provision of basic inputs.

2.4 Immunization

The Expanded Program on Immunization (EPI) has been reactivated and strengthened, vaccination campaigns have been undertaken, and the efficiency and effectiveness of the EPI have been improved, through technical support and the provision of critical resources.

2.5 Zoonoses

Permanent advisory services for the Program for the Elimination of Urban Rabies were maintained. There was also support and coordination of activities within the framework of the Paraguay-Brazil agreement for the elimination of urban rabies, as well

as the training of professionals in the treatment of human rabies, in addition to diagnosis and epidemiological surveillance.

Research was carried out on the characteristics of canine rabies, as well as a post-rabies vaccination serological study of professionals at risk and biosafety studies in diagnostic laboratories.

An epidemiological surveillance system for canine and human rabies and equine encephalitis was developed, national resources were mobilized for canine rabies vaccination, and interinstitutional coordination activities for control of tuberculosis and brucellosis were continued.

The Organization provided support for the design of the Program for the Eradication of Foot-and-Mouth Disease (1992-2006), prepared technical documents, and supported the activities of the Program for the Plate River Basin. In addition to a project for comprehensive action in San Patricio, training activities have been carried out, as well as weekly and monthly dissemination of epidemiological information.

2.6 *Food*

The Organization supported the Ministry of Public Health and Social Welfare in the formulation a national program for food protection, and the Ministry of Agriculture and Livestock in the formulation of the plan of action for the surveillance of food of livestock origin.

Cooperation for a diagnostic study of the status of food surveillance has been carried out in the cities of Concepción and Asunción.

2.7 *Communicable Disease Control*

Training in the epidemiological method was provided to health workers, and epidemiological surveillance activities have been consolidated, with emphasis on poliomyelitis. The country is in the process of certifying the elimination of this disease, and vaccination coverage is increasing.

Epidemiological surveillance of diarrheal diseases was intensified, improving the etiological diagnosis in response to the cholera risk.

The National Service for the Eradication of Malaria applied the epidemiological stratification process, defining priority areas, and launched a program for the elimination of *Triatoma infestans*. The national AIDS program has the capability for diagnosing cases and studying risk groups, in addition to strong support from the mass media.

Regulations governing blood transfusions to prevent AIDS transmission were established, and prevention activities in the area of hemotherapy were increased. The program for the control of tuberculosis has modified the case management standards, which are being implemented at the level of the health services.

Joint activities for the prevention of cholera were carried out in border areas of Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay. In addition, support was provided for the preparation of a manual on epidemiological surveillance, the National Plan for the Control of Chagas' disease, the Plan for the Control of Dengue, and a correspondence course in epidemiology for 50 professionals from the Ministry of Health. Numerous training courses, fellowships abroad, and the procurement of diagnostic inputs were also part of the project for communicable diseases.

2.8 *Health Promotion*

Up to 1993, the results were limited, since these efforts simply consisted of activities geared toward patients with cardiac disease. Health programs for adolescents were designed, with emphasis on detecting deficiencies in visual acuity.

2.9 *Environmental Health*

The participation of professionals in short courses outside the country continued; training events were held, with a total coverage of 2,000 participants at various levels; and regulations were formulated for part of the sanitary code.

Cooperation was expanded to numerous institutions, such as the Ministry of Justice and Labor, the Sanitary Works Corporation, the Ministry of Agriculture and Livestock, the municipal government of Asunción, the Welfare Bureau, and Technical Secretariat for Planning of the Office of the President of the Republic.

The Organization participated in the identification of problems such as contamination from toxic waste, malathion, and other chemicals, and provided support for the mobilization of external financial resources.

3. *Analysis of the Allocation and Execution of Cooperation Resources*

The total annual budget of the Representative Office was about US\$ 1.6 million during the period in question. There was a notable reduction in extrabudgetary resources at the end of the quadrennium, due to cutbacks in the contributions to the programs for AIDS prevention and control and the EPI and the end of PAHO's role as executing agency of the UNFPA Project (Table 1).

The degree of budget execution was excellent, exceeding 86% in every year of the period of evaluation, with a general consistency between programming and execution, as well consistency with the priorities set by the national authorities and the mandates of PAHO's Governing Bodies.

The analysis of the budget structure, by object of expenditure, reveals a stable situation during the period, except for spending on short-term consultants, which fell markedly in the last two years of the period, from around 12% in the initial years to 3% in 1993.

With regard to the other categories, expenditures for professional posts remained around 30%, for supplies and equipment, 20%, and for courses and seminars, approximately 17%. The resources utilized for contract services accounted for 16% of the average expenditures for the period. The average spending on fellowships was low during the period (1.5%) (Table 2).

With regard to the structure of the budget executed, by program area, the areas of communicable disease prevention and control and environmental health were stable during the period, accounting for roughly 19.5% and 9.5%, respectively, of the budget executed. Also stable were operating expenditures, which represented an average of 16.5% of the budget executed.

Development of health system infrastructure showed an absolute and percentage increase in its share of the budget, while maternal and child health suffered a major cutback that reduced its resources by 80%, due to the shutdown of the UNFPA Project (Table 3).

With regard to spending on supplies and equipment, the largest proportions corresponded to maternal and child health, communicable disease prevention and control, and development of health system infrastructure. Expenditures for supplies and equipment in these areas varied significantly during the period; expenditures of this type in development of health system infrastructure increased markedly in 1993, owing to an agreement with the World Bank for the purchase of drugs. Communicable disease prevention and control and maternal and child health experienced major reductions in this category, due to cutbacks in the contributions from the AIDS and UNFPA programs (Table 4).

The number of consultant/months contracted for cooperation to the country averaged 29 months/year for the period. It should be pointed out, however, that in 1991, 54 consultant/months were contracted, an increase attributable to the area of health services development. During the period analyzed, the highest proportions of contracts

corresponded to the area of development of health system infrastructure and communicable disease prevention and control (Table 5).

With regard to the total number of fellowship/months granted in the quadrennium, small variations around an average of 16 fellowship/months/year can be seen, except for 1992, when 23.5 fellowship/months were subsidized. The structure by program area shows that the highest volumes corresponded to the areas of veterinary public health, development of health system infrastructure, and communicable disease prevention and Control (Table 6).

With respect to the courses and seminars financed by cooperation during the period, there has been a significant decrease in the annual totals, from 205 in 1990 to 61 in 1993—a reduction shared by development of health system infrastructure, maternal and child health, and communicable disease prevention and control, which were the areas with the greatest activity in this regard. Veterinary public health and environmental health remained stable, except for a significant increase in 1992 in the area mentioned above (Table 7).

4. Evaluation of the Impact of Cooperation

Using different qualitative methods to measure the scope of the objectives,⁷ such as a review of the four-month progress reports, the annual reports, the documents analyzing the cooperation, and the meetings of managers, it can be stated that the technical cooperation has had positive medium- and long-term effects, such as:

- a) The promulgation of the National Constitution containing numerous articles related to health—especially Article 45 on the national health system, and Article 163 on the authority of the Departmental Governors in social and health matters, in addition to others related to women's health and social and human rights. PAHO's support to influential groups and institutions that submitted proposals for the drafting of the new Constitution was instrumental in obtaining these achievements.
- b) The law that established the National Health Council, supported from its inception by PAHO, has elicited a rather significant response in two of the three administrations covering the period of the report. The Regional Health Councils, moreover, have served as a forum for the participation of different civic groups in most of the departments of the country.

⁷ Ernesto Cohen and Rolando Franco. *Evaluación de Proyectos Sociales*. Siglo XXI Editores. 1992.

- Following the meeting for the joint evaluation of technical cooperation, there was a change of Minister of Health; this has meant some new priorities in the Ministry of Public Health and Social Welfare.
- At the meeting for the joint evaluation of technical cooperation in March 1994, the SOPPs for the period 1991-1994 were used. Adaptation of the cooperation to the current SPOs for the period 1995-1998 will be necessary.

Despite these two circumstances, there is no doubt that the meeting's objectives were achieved because of the effective participation not only of the personnel of the Ministry of Public Health and Social Welfare but of other institutions and PAHO, enabling the cooperation provided to the country to produce the impact necessary for improving the health status of the Paraguayan people.

Table 1
PAHO/WHO Budget, by Origin of Funds
Paraguay, 1990-1993
(IN THOUSANDS OF DOLLARS)

ORIGIN OF FUNDS	1990		1991		1992		1993	
	\$	%	\$	%	\$	%	\$	%
REGULAR FUNDS	1042	59	1095	72	1109	72	1334	77
EXTRABUDGETARY FUNDS	718	41	429	28	512	32	399	23
TOTAL	1,760	100	1,524	100	1,621	104	1,733	100

Table 2
Structure of Budget Executed, by Object of Expenditure
PAHO/WHO-Paraguay, 1990-1993
(IN THOUSANDS OF DOLLARS)

OBJECT OF EXPENDITURE	1990		1991		1992		1993	
	\$	%	\$	%	\$	%	\$	%
PROFESSIONAL POSTS	381	24	379	28	509	35	509	34
STC	195	13	151	11	21	1	43	3
DUTY TRAVEL	11	1	23	2	22	2	25	2
CONTRACT SERVICES	229	15	246	18	271	19	183	12
OPERATING EXPENDITURES	94	6	44	3	70	5	74	5
SUPPLIES AND EQUIPMENT	352	23	232	17	248	17	339	23
BUILDING							45	3
FELLOWSHIPS	32	2	16	1	17	1	25	2
COURSES AND SEMINARS	256	16	242	18	285	20	244	16
TOTAL	1,550	100	1,333	98	1,43	100	1,487	100

Table 3
Structure of Budget Executed, by Program Area
PAHO/WHO-Paraguay, 1990-1993
 (IN THOUSANDS OF DOLLARS)

PROGRAM AREAS	1990		1991		1992		1993	
	\$	%	\$	%	\$	%	\$	%
HEALTH SYSTEM INFRASTRUCTURE	398	26	443	33	346	24	661	44
MATERNAL AND CHILD HEALTH	527	33	336	24	283	20	95	6
ENVIRONMENTAL HEALTH	127	8	141	11	137	9	148	10
COMMUNICABLE DISEASE PREVENTION AND CONTROL	243	16	211	16	404	28	271	18
VETERINARY PUBLIC HEALTH	12	1	18	1	23	2	24	2
MANAGERIAL SUPPORT FOR NATIONAL HEALTH DEVELOPMENT	243	16	183	14	251	17	289	19
TOTAL	1,550	74	889	66	1,098	76	827	55

Table 4
Expenditure for Supplies and Equipment, by Program Area
PAHO/WHO-Paraguay, 1990-1993
 (IN THOUSANDS OF DOLLARS)

PROGRAM AREAS	1990		1991		1992		1993	
	\$	%	\$	%	\$	%	\$	%
HEALTH SYSTEM INFRASTRUCTURE	5	1	16	7	11	4	262	77
MATERNAL AND CHILD HEALTH	256	73	126	54	92	37	15	4
ENVIRONMENTAL HEALTH	12	3	6	2	1		5	1
COMMUNICABLE DISEASE PREVENTION AND CONTROL	61	17	73	32	134	54	55	16
VETERINARY PUBLIC HEALTH	3	1	4	2	4	2	3	1
MANAGERIAL SUPPORT FOR NATIONAL HEALTH DEVELOPMENT	15	4	6	3	7	3		
TOTAL	352	99	231	100	249	100	340	99

Table 5
Number of Consultant/Months Contracted, by Program Area
PAHO/WHO-Paraguay, 1990-1993

PROGRAM AREAS	1990		1991		1992		1993	
	NO.	%	NO.	%	NO.	%	NO.	%
HEALTH SYSTEM INFRASTRUCTURE	8	50	31	53	13	59	9	36
MATERNAL AND CHILD HEALTH	5	31	7	13	2	8	2	8
ENVIRONMENTAL HEALTH			4	7	2	7	4	17
COMMUNICABLE DISEASE PREVENTION AND CONTROL	2	13	9	17	3	15	6	25
VETERINARY PUBLIC HEALTH	1	6	3	6	2	11	3	10
TOTAL	16	100	54	96	22	100	24	96

Table 6
Grant/Months, by Program Area
PAHO/WHO-Paraguay, 1990-1993

PROGRAM AREAS	1990		1991		1992		1993	
	NO.	%	NO.	%	NO.	%	NO.	%
HEALTH SYSTEM INFRASTRUCTURE			5.3	49	10.5	45	1.8	13
MATERNAL AND CHILD HEALTH	6.1	42					0.5	4
ENVIRONMENTAL HEALTH							1.6	11
COMMUNICABLE DISEASE PREVENTION AND CONTROL			5.5	51	8.3	38	1.3	9
VETERINARY PUBLIC HEALTH	8.5	58			3.7	17	9	63
TOTAL	14.6	100	10.8	100	22.5	100	14.2	100

Table 7
Number of Courses Offered, by Program Area
PAHO/WHO-Paraguay, 1990-1993

PROGRAM AREAS	1990		1991		1992		1993	
	NO.	%	NO.	%	NO.	%	NO.	%
HEALTH SYSTEM INFRASTRUCTURE	86	42	38	42	27	28	11	18
MATERNAL AND CHILD HEALTH	76	37	29	32	29	30	26	43
ENVIRONMENTAL HEALTH	4	2	7	8	23	24	5	8
COMMUNICABLE DISEASE PREVENTION AND CONTROL	32	16	11	12	11	11	13	21
VETERINARY PUBLIC HEALTH	7	3	5	6	6	6	6	10
TOTAL	205	100	90	100	96	99	61	100