EVALUATION OF THE PAN AMERICAN CENTER FOR SANITARY ENGINEERING AND ENVIRONMENTAL SCIENCES (CEPIS)

The Director of the Pan American Sanitary Bureau (PASB) requested the Office of Analysis and Strategic Planning, in collaboration with the National Audit Office of the United Kingdom and external consultants to conduct a broad-based relevance, effectiveness, and efficiency evaluation of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS). In the context of a discussion on the Pan American Centers at the Subcommittee on Planning and Programming of the Executive Committee in March 2002, the Director proposed presenting the conclusions of the evaluation to the Governing Bodies.

The evaluation concluded that CEPIS is a valuable source of technical cooperation and a broker of knowledge. It would be too much of a loss to abolish it and take too much effort to try to recreate an international agency to fulfill its role. However, CEPIS should adapt its present role and functions in terms of being more proactive, and working more through networks of institutions to achieve a multiplier effect on its technical cooperation. CEPIS should transform itself into a catalyst organization, as was recommended by a 1998 Special Advisory Group convened by the Director of PASB, which produced a future-oriented study on CEPIS. In tune with this proposed new direction of CEPIS, a shift in the internal allocation of resources should be expected. CEPIS should develop an appropriate resource mobilization strategy as well as a permanent internal capacity for resource mobilization that would originate and coordinate efforts on behalf of the Center. The merger of two different technological cultures is not easy, even in private industry. The evaluation team believes that the construction of a "new" CEPIS is still a work in progress which deserves the support of an external advisory body.

This background summary was distributed to Members of the Executive Committee at its 130th Session. The full evaluation report was also made available to Committee members. It is hoped that in the process of evaluating this particular Center an evaluation model will be developed that can be applied to other Centers of the Organization. The Pan American Sanitary Conference may wish to discuss this issue, consider the resolution CE130.R15 recommended by the Executive Committee, and indicate future actions that the Bureau should undertake.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mandate and Objectives of the Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>2. Evaluation Design</td>
<td>3</td>
</tr>
<tr>
<td>3. Data Sources and Methods</td>
<td>4</td>
</tr>
<tr>
<td>4. Limitations of the Study</td>
<td>6</td>
</tr>
<tr>
<td>5. Is CEPIS Effective?</td>
<td>7</td>
</tr>
<tr>
<td>6. Is CEPIS Well Managed?</td>
<td>10</td>
</tr>
<tr>
<td>7. Has the Merger with the Pan American Center for Human Ecology and Health (ECO) Produced the Expected Synergies?</td>
<td>13</td>
</tr>
<tr>
<td>8. Conclusions</td>
<td>14</td>
</tr>
<tr>
<td>9. Recommendations</td>
<td>15</td>
</tr>
<tr>
<td>9.1 On Effectiveness and Relevance</td>
<td>15</td>
</tr>
<tr>
<td>9.2 On Management</td>
<td>15</td>
</tr>
<tr>
<td>9.3 On the CEPIS-ECO merger</td>
<td>16</td>
</tr>
<tr>
<td>10. Action by the Pan American Sanitary Conference</td>
<td>17</td>
</tr>
<tr>
<td>Annex: Resolution CE130.R15</td>
<td></td>
</tr>
</tbody>
</table>
1. **Mandate and Objectives of the Evaluation**

The Director of the Pan American Sanitary Bureau requested the Office of Analysis and Strategic Planning, in collaboration with the National Audit Office of the United Kingdom and external consultants, to conduct a broad-based relevance, effectiveness, and efficiency evaluation of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS). It is hoped that in the process of evaluating the Center an evaluation model will be developed that can be applied to other Centers of the Organization. This document represents a summary of the evaluation report. The full version of the evaluation report is contained in Document CSP26/INF/2.

The Director had asked the evaluation team to address four main issues:

- Is the original rationale for the Pan American Health Organization (PAHO) to operate this Center still valid?
- What is the nature of the working relations among CEPIS and PAHO’s country offices, and do these relations result in actual synergies?
- What is the financial outlook, or medium- and long-term viability of CEPIS as well as suggestions on how can it be improved?
- Has the merger of resources from the former Pan American Center for Human Ecology and Health (ECO) into CEPIS been effective? What were the characteristics of the implementation of the merger of resources, and what lessons could be learned?

2. **Evaluation Design**

CEPIS has undergone several reviews and studies in recent years. In 1998 a Special Advisory Group convened by the Director of PASB made recommendations about CEPIS’ future strategies and priorities. Some evaluations have been carried out of specific externally funded projects, or of CEPIS’ participation in regional PAHO projects, such as Workers’ Health. However, the overall relevance, effectiveness, and efficiency of CEPIS have not been subject to an evaluation.
The key issues identified by the Director coalesce around three evaluation questions:

- Is CEPIS delivering effective, relevant, useful, high-quality technical cooperation which contributes to improving environmental health in the Americas?
- Is CEPIS well managed?
- Has the merger of some resources from the former ECO with CEPIS created the intended synergies?

3. Data Sources and Methods

The evaluation questions were addressed through a detailed analysis of material and Center data; an analysis of a sample of CEPIS project files, and interviews with CEPIS staff, key stakeholders in Peru, PAHO Headquarters staff and other regional experts, and surveys. To complement the skills of PAHO’s Office of Strategic Analysis and Planning team, additional internal assistance was provided by PAHO’s Budget Office, and external advice from the National Audit Office of the United Kingdom and from a consultant on health and the environment.  

---

1 The CEPIS evaluation team included: Roberto Rivero (evaluation coordinator), Office of Analysis and Strategic Planning/Deputy Director’s Office, PAHO; David Goldsworthy, National Audit Office, London, United Kingdom; Luis U. Jáuregui, JVP Consultores, Buenos Aires, Argentina; Román Sotela, Chief, Budget Office, PAHO; Cristina Puentes-Markides, Office of Analysis and Strategic Planning, PAHO; Carlos Walter, Office of Analysis and Strategic Planning, PAHO. Mónica Stenning, Silvia Molina, and Jenny Newhall, PAHO, provided valuable secretarial support. Dianne Arnold, Eric Kwak, and Sergio Roschke, Management and Information Support Department, PAHO, provided important assistance in relation to the survey software.
<table>
<thead>
<tr>
<th>Evaluation Issues</th>
<th>Method</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is CEPIS delivering relevant, effective, high-quality</td>
<td>• Surveys</td>
<td>• Agreements</td>
</tr>
<tr>
<td>technical cooperation?</td>
<td>• Semi-structured</td>
<td>• Historical documents</td>
</tr>
<tr>
<td></td>
<td>interviews</td>
<td>• CEPIS administrative and program data</td>
</tr>
<tr>
<td></td>
<td>• Analysis of program</td>
<td>• CEPIS project documents</td>
</tr>
<tr>
<td></td>
<td>and administrative data</td>
<td>• PAHO Governing Bodies’ documents</td>
</tr>
<tr>
<td></td>
<td>• Site visit</td>
<td>• Division of Health and Environment (HEP) documents</td>
</tr>
<tr>
<td>Is CEPIS well managed?</td>
<td>• Interviews</td>
<td>• Administrative records</td>
</tr>
<tr>
<td></td>
<td>• Site visit</td>
<td>• Financial records</td>
</tr>
<tr>
<td></td>
<td>• Analysis of program</td>
<td>• PAHO programming documents</td>
</tr>
<tr>
<td></td>
<td>and administrative, financial data</td>
<td>• CEPIS programming and budgetary documents</td>
</tr>
<tr>
<td></td>
<td>• Budgetary and financial analysis</td>
<td>• Division of Health and Environment (HEP) documents</td>
</tr>
<tr>
<td>Has the merger of resources produced the expected</td>
<td>• Questionnaires to CEPIS</td>
<td>• PAHO and CEPIS staff rosters</td>
</tr>
<tr>
<td>synergies?</td>
<td>• Surveys</td>
<td>• Special Advisory Group report</td>
</tr>
<tr>
<td></td>
<td>• Interviews</td>
<td>• CEPIS and Division of Health and Environment (HEP) documents</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes on Data Collection

**Surveys and Interviews:** 157 surveys were sent to or responded in person by key individuals throughout the Region: senior staff at PAHO’s Headquarters (100%); to PAHO/WHO Representatives (89%); to Peruvian government officials, nongovernmental organizations, and bilateral and multilateral agencies (80%); and to government officials of other PAHO Member States, nongovernmental organizations (NGOs), bilateral and multilateral agencies (38%). The surveys sought respondent’s perceptions on such issues as how effectively CEPIS carried out its work, the relevance of CEPIS’ work, the level of consultation, and timeliness of responses as well as seeking concrete examples of ways CEPIS had made a difference. Together with the surveys the evaluation team conducted 31 semi-structured interviews, based on the survey, which were carried out with key individuals in Peru and Washington to probe responses more deeply, and to triangulate responses to postal surveys.

**Site Visit:** A one-week site visit was made by the four key researchers. The visit included interviews with a cross-section of CEPIS staff, an examination of project control systems for a sample of activities, and a review of the use of the Technical Cooperation Planning, Programming, and Evaluation System (AMPES).

**Analysis of Program and Administrative Data:** Data from AMPES was analyzed to examine budgetary and expenditure trends and to compare planned and recorded project outcomes.

**Document Reviews:** Previous reviews, future-oriented studies, and evaluations of specific CEPIS activities carried out by internal or external bodies were examined to assess acceptance of previous recommendations.

4. **Limitations of the Study**

Possible threats to internal validity could be present in terms of the selection of the survey respondents. Most of the government and some nongovernmental organizations (NGOs) respondents belong to a regional water and sanitation professional community, many of whom have enduring ties to CEPIS and to PAHO’s health and environment professionals, particularly in Peru and other South American countries. In some cases, some of the surveys intended for PAHO/WHO Representatives were answered by health and environment advisors in the PAHO country offices. A greater response rate from government officials and multilateral organizations could have strengthened the sample of the evaluation team’s survey. It would also have been helpful if members of the evaluation team could have revisited CEPIS and could have visited a sample of other Member States of PAHO to ascertain directly the opinion of government and NGOs officials concerning CEPIS’ work—which among other things would have
enlarged the sample size. A visit to Mexico would have been particularly important, in order to analyze how resources that were once a part of ECO are currently addressing the needs of Mexico and—potentially—the needs of other PAHO Member States. In addition, members of the evaluation team visited CEPIS in July and September 2001, a period of transition in Peru, the host government of CEPIS, and thus were not able to ascertain long-term host government financial policy toward the Center. In terms of external validity—how or whether to generalize the findings of the study to other PAHO Centers—some findings, e.g., regarding Center mergers and the need to diversify and expand nonregular budget sources, could potentially be generalized, but attention should be given to the fact that each PAHO Center is a unique institution in its own right.

5. Is CEPIS Effective?

CEPIS is seen as a positive and effective force in the Region that responds quickly to requests for assistance.

Over 85% of all respondents to the four surveys considered that the technical cooperation activities and services provided by CEPIS are relevant. CEPIS is perceived as an agency that has the ability to convene other institutions, to address specific issues of common concern and arrive at practical solutions. There is frequent praise of the Pan American Network of Information and Documentation in Sanitary Engineering and Environmental Sciences (REPIDISCA), the CEPIS’ documentation service, and its rapid response in emergency and disaster situations; CEPIS’ role during the cholera epidemic was repeatedly highlighted. Respondents also noted that CEPIS’ prestige was the product of more than 30 years of good service to the host country and to the rest of Latin America. The Center is perceived as being accessible and user-friendly, particularly its laboratory. Its current and past leadership teams are deemed to be a major source of strength. CEPIS’ additional strengths include its publications and its Virtual Library for Health and Environment. Over the past decade CEPIS has been included in future-oriented studies (1996 and 1998), and several evaluations have been carried out of some of its projects and activities, particularly of those funded by extrabudgetary resources. CEPIS has received good reviews from internal and external auditors. In 2001 CEPIS received the PAHO Director’s Award as an Outstanding Team. CEPIS has successfully adapted to the changing needs of the Region and this fact has also contributed to the positive reviews.

Local/international NGOs that have been working closely with CEPIS were equally enthusiastic about the Center. These bodies perceive CEPIS as a good partner and stated that the international donor community is more supportive when local NGOs are supported by, or have entered into an alliance with CEPIS.
CEPIS’ priorities are seen as appropriate though more could be done to work with regional health and environment policy-makers.

Respondents were generally supportive of CEPIS’ priorities but thought that more could be done to work with regional health and environment policy-makers. Some respondents, however, considered that environmental epidemiology and toxicology were areas in which CEPIS still has much work to do to better attend to regional needs. Some PAHO country office respondents indicated that by placing greater emphasis on technical cooperation for strategic planning and institutional strengthening (or reform), CEPIS would be strengthened and have a better chance of carving out for itself a more secure niche for the future in the field of health and environment.

In addition, CEPIS does not adequately reach every country that it should—particularly in the English-speaking Caribbean. CEPIS is an overwhelmingly Spanish-language institution, with few documents in English and fewer in French. While there is interaction with environmental institutions in the Caribbean, this is not done at a level that a number of respondents found satisfactory.

Some respondents, particularly those from small countries and from PAHO offices remote from CEPIS, indicated that they wanted to know more about, and have more direct contact with CEPIS. These respondents felt that the Website and the Virtual Library for Health and Environment did not offer the kind of dialogue they wanted. In particular, it was suggested that the Caribbean States, the PAHO country offices in that area, and CEPIS would benefit from a monthly or quarterly CEPIS newsletter in English, focusing on the Caribbean, that would include highlights of CEPIS’ activities in this sub-region, as well as the services that the Center offers.

CEPIS is perceived as struggling to balance a limited budget with potentially large demands for services. There is a general perception that the Center is excessively dependent on someone else’s funds—inside and outside PAHO—to be able to do much-needed work. Either for lack of sufficient funds, or because of a 33-year-old organizational culture driven toward “fixing” specific, compartmentalized water and sanitation problems (or both), CEPIS is perceived as more reactive than proactive, notwithstanding the fact that, particularly in the area of information, product development, and the laboratory, CEPIS has taken significant proactive steps. Respondents consider that CEPIS should gravitate more toward technology assessment, to becoming an “auditor” of available technologies, as opposed to trying to develop new technologies with very scarce resources.

A perceived lack of regular funds for sustained consultation or a proactive approach frequently parallels the view that CEPIS could also benefit from having an organized, professional resource mobilization capability. Some respondents felt that
CEPIS could benefit from a unit or specialized group within the Center which focused on resource mobilization, public relations, marketing, and international relations. Such a unit could play an advocacy role for health and environment by promoting the environmental agenda in the Americas. It was suggested, in addition to an external relations and fund-raising office, every senior CEPIS staff member and technical officer should have fund-raising as part of their job descriptions and be provided with opportunities for developing this skill.

Respondents overwhelmingly (88%) believe that there is still a need for a regional environmental health center and that CEPIS should provide this service (79%) without thwarting the evolution of local consultancy services.

The majority of respondents did not identify a clear alternative to CEPIS and considered that CEPIS fills a vital niche, particularly when it engages in strategic technical cooperation with governments, helping them to develop public policies and train their staffs. The countries deem it vital to have an institution with a Pan-American mandate to act as a catalytic agent of multiple national and international actors.

**Overall, the relationship between CEPIS and the PAHO country offices is good.**

Overall, the relationship between CEPIS and the PAHO country offices is very positive, with about 90% of the PAHO/WHO Representatives stating that it is “good” or “very good.” Nevertheless, PAHO/WHO Representatives felt that CEPIS lacked both specific cooperation policies relating to each country, and mechanisms for dialogue with the countries to establish priorities and cooperation plans. The responses revealed that a number of PAHO country offices would like to see a more formal, regular process for developing partnership programs with CEPIS—dovetailing with and going beyond PAHO’s Biennial Program Budget (BPB) planning process. CEPIS is seen as “demand-driven,” in a way that some respondents see dangerously close to reacting to almost ad hoc demands from their own offices.

The evaluation team believes that the original rationale for PAHO operating a center such as CEPIS is still valid. The team believes that CEPIS’ cooperation should be adjusted to fit the changed circumstances and a wider field of operations. There is a real demand for technical cooperation from the countries and CEPIS has the capacity to respond to these demands. As the areas of intervention evolve and redefine themselves, CEPIS must continue adjusting its programs and priorities.
6. Is CEPIS Well Managed?

Management structures and processes need to be more clearly defined.

CEPIS does not have a clear senior staff management structure with detailed minutes of senior staff meetings and recorded decisions. It also lacks a medium-term strategic plan which identifies CEPIS’ main priorities and broadly states what it believes it can achieve from its own resources plus, where known, the resources of other third parties. Such a plan would need to be developed in conjunction with key stakeholders and outline changes which would be introduced to CEPIS’ current range of activities. The process and the product of a strategic planning exercise would make it easier for CEPIS to define its goals vis-a-vis other key stakeholders, including international donors and partner health and environment authorities. It would also be a useful internal management tool for assessing whether the expected results and activities proposed for inclusion in the BPB can demonstrate their contribution to CEPIS’ overall strategic directions.

External donors were generally satisfied with the way CEPIS manages grants. They felt that they were kept adequately informed of progress and that CEPIS delivered on agreed tasks.

CEPIS has developed guidance on project design but more consideration needs to be given to methods of achieving objectives, communicating results, managing risks and evaluating impacts.

CEPIS has developed its own good practice guidance on project design and most of those interviewed carried out elements of sound project management. However, practices varied widely. Project files and documents were not in a consistent form and new staff were not being systematically trained in project management skills. The more detailed project documents were associated with external bids for funding and it was not always evident how these projects fit within CEPIS, and more generally PAHO’s policy directions. In the absence of proper project documents, it was not clear if risks to a project’s success had been considered. The evaluation team found no evidence that CEPIS staff were systematically identifying potential risks and ways to manage them. There was little evidence at the project development stage that consideration had been given to how a project would be evaluated or the results communicated to key audiences. The team also found over-centralization in certain routine administrative procedures.

CEPIS has no formal and systematic quality control system to ensure that all products and services are systematically reviewed prior to release. However, most of those interviewed had developed their own review arrangements. In some cases this
involved the creation of internal ad hoc groups, occasionally cross-discipline, and in others the use of external reference partners.

Staff development requires a higher profile.

Staff are CEPIS’ major resource and the level of enthusiasm and dedication that staff exhibited were evident during the evaluation team’s site visit. However, CEPIS does not seem to have a human resource strategy to identify staff profiles and needs for the future, nor how existing staff throughout the Center can best be developed. There is an annual training program which lists the staff development courses planned for a year—including external and internal courses. Yet, there are no formal records of what additional training individual staff members need to receive over time, following a development plan for the Center and for the individual. The one area which has prioritized staff training, as part of its accreditation process, is the laboratory. But even there staff are struggling to find time to meet the obligatory requirement of training each year.

While funding for CEPIS is tight, training is never a luxury for the public sector in these technologically fast-paced times. Attending courses externally may not always be feasible but through the use of Web-based courses and through using in-house staff to deliver training, staff development in CEPIS could be given a substantial boost.

CEPIS’ overall expenditure grew steadily during the 1990s but declined slightly in 2000-2001.

The merger into CEPIS of some of the resources of the former ECO Center gave CEPIS three additional professional posts (an Epidemiologist, a Toxicologist, and an Environmental Pollution Advisor), along with US$ 727,000 of nonpost funds. The non-post funds included funds from the abolishment of a vacant P4 post. Given the influx of funds, there has been much interest in how the Center has carried out its business effectively. One of the main issues that the evaluation team analyzed is whether or not this level of funding is adequate, and if it is being used in the most effective manner given the Center’s transformation with the merger, and its redirection toward a catalyst organization as a result of the Director’s 1998 Special Advisory Group study. The 2002-2003 BPB attempts to define the Center’s functions more effectively and the number of CEPIS projects has expanded from five in its 2000-2001 BPB to nine newly defined projects in the 2002-2003 BPB. There was consensus among those staff members interviewed that CEPIS needed to become more proactive. However, we feel that as each advisor is only allocated $10,000 per biennium for proactive management of their respective programs, in reality there is little they can initiate or achieve.
Although CEPIS’ regular budget funding is expected to remain fairly stable, funding from other sources is likely to be less predictable and CEPIS will need to do even more to diversify funding sources.

CEPIS’ regular budget is expected to remain fairly stable, although as funding from other sources becomes less predictable, CEPIS will need to do even more to diversify its funding base. PAHO’s regular budget for CEPIS is some 62% of the 2000-2001 total budget, down from about 75% in 1994-1995. This is not due to a decrease in absolute funding; rather it is a result of an increase in share of the total budget from both extrabudgetary sources and cost-recovery work. Although the regular budget element has grown in recent years, the share of funding contributed by the other two sources doubled during this period, increasing in absolute terms by 112% and 350% respectively.

The CEPIS laboratory’s success story is promising. The laboratory has evolved from functions limited to research of water treatment in 1970, to a full-blown accredited reference laboratory in 2001. Income generation has grown significantly during this period. In 1990-1991, activity from laboratory services totaled $170,000. In 2000-2001 the laboratory generated over $750,000 in income, mainly from Peru and a few other countries. A key driver of this growth has been CEPIS’ ability to expand the quality and range of services provided by the laboratory, towards areas of technical cooperation and away from the more “retail” side of processing environmental samples. The laboratory currently generates most of its income from accreditation and advisory services as a reference laboratory. And having recently been accredited by the Canadian Association of Environmental Accredited Laboratories (CAEAL), the current trend in income generation is expected to continue.

CEPIS has many of the elements in place of a well-managed organization and has proved effective in seeking funds from a variety of sources. Over the medium term, core funding for CEPIS from PAHO funds is unlikely to grow. Yet the demand and need for CEPIS’ services continues to expand. CEPIS has worked hard to seek extrabudgetary funds and has been by and large successful in this endeavor. Grants from other governments and international organizations accounted for 19% of the budgeted expenditure in 2000-2001, and the laboratory has proved particularly effective in receiving grants and selling its services. In the medium term these sources should keep CEPIS financially viable though there is a need to seek grants from a wider range of donors, and to market CEPIS’ work more aggressively, especially the work with the indigenous rural poor and those living on the fringes of the urban centers. To this end, CEPIS needs to build up its marketing/grant-seeking capabilities.
7. **Has the Merger with the Pan American Center for Human Ecology and Health (ECO) Produced the Expected Synergies?**

*Opinions are divided on whether the merger with ECO was well implemented.*

Opinions are divided among respondents on whether the merger of CEPIS with some financial, human, and post resources from the former ECO Center in Mexico was well implemented with large numbers of respondents uncertain. In open-ended responses many respondents indicated that they felt that something had been lost through the merger which has yet to be fully restored. Several Washington-based PAHO managers, in particular, considered that CEPIS had yet to fully grasp the complexity of the work that ECO used to carry out in relation to the environmental impacts on human health, and had not taken enough steps to close the knowledge, skills, and program gaps resulting from the merger. At the same time there is evidence in the work of CEPIS and the response of CEPIS staff that some progress is being made and that staff are developing new ways of working which could result in future synergies and advances.

Several respondents felt that the merger was done too quickly, with too many questions unanswered and the mandate unclear. One respondent suggested that when the merger decision was taken, PAHO's Division of Health and Environment (HEP) lacked a comprehensive vision of its long-term future outside the traditional water, sanitation, and solid waste areas. In the future, before abolishing or creating a Center, or merging Centers, there is a need for exercises in futures/scenarios/strategic planning, involving as many stakeholders as possible. A few respondents saw the merger primarily as a cost-cutting exercise during which adjustment problems would linger on for several years, and eventually the reshuffling would result in changes to the characteristics of both former components.

*More needs to be done to work with governments to monitor environmental health risks and to keep the public informed about such risks.*

Associated with a new catalytic role, there is an expectation that CEPIS should do more to advise and motivate national authorities, the academic community, NGOs and communities on the processes of assessing, prioritizing and controlling environmental risks in the Americas. In particular, CEPIS has a role to play in addressing the growing gap that separates the scientific description of risks and the public understanding of those risks. To do this involves CEPIS staff moving beyond the traditional scientific and technical focus of the two environmental health Centers and developing new ways of communicating about risk through the mass media to the community, although a strong base in science and technology must be maintained to underpin these broader activities. While CEPIS provides wide-ranging training programs across the Region on
environmental health risks, it has not developed a strategic plan to show what it intends doing in this field nor a strategy for getting clear messages to the general public.

A new CEPIS should focus not only on existing environmental health problems of the Region, but also play a role in scanning for future threats, as suggested by the 1998 Special Advisory Group. In particular, that Group recommended that CEPIS should provide guidance to Member States on how to ensure that all major development projects incorporate an element of environmental health assessment into their planning. To implement this recommendation, CEPIS has made resources available by translating documents of the World Health Organization (WHO) into Spanish, has made a tutorial program available on the Website and has revised a training course developed by ECO. CEPIS, however, could do more to monitor major development projects in the Region, to alert Member States to the need to carry out environmental health assessments and to disseminate good practices in this area.

The apparent over-reliance on the Virtual Library for Health and Environment in the progression to the new CEPIS deserves some attention, since it would seem hard to build up the nontraditional areas at CEPIS, in its progress toward a new Center, with such heavy reliance upon one major approach.

The picture that emerges from the analysis of the CEPIS-ECO merger is one of a Center working to become the new CEPIS suggested by the 1998 Special Advisory Group. Serious efforts are being done in this direction, with renewed emphasis in the 2002-2003 BPB. However, when looking at the totality of the process involving the closing of ECO, the reinforcing of CEPIS with ECO resources, and the four-year evolution toward a new CEPIS, many respondents from the PAHO country offices and Headquarters communicated a sense of loss for PAHO and the Region, particularly in answers to open-ended questions. It would seem from their responses that this loss has yet to be remedied, either by CEPIS or by another entity inside or outside PAHO.

8. Conclusions

CEPIS is perceived as a valuable source of technical cooperation and a broker of knowledge. It would be too much of a loss to abolish it and too much effort to try to recreate an international agency to fulfill its role. However, CEPIS should adapt its present role and functions in terms of being more proactive, and working more through networks of institutions having a multiplier effect on its technical cooperation.

CEPIS must direct itself toward a transformation into a catalyst organization, as was recommended by the 1998 Special Advisory group. In tune with this new direction of CEPIS, a shift in the internal allocation of resources should be expected. To the extent
that this process continues, CEPIS’ planning, programming, and budgeting process must find a better way to distribute available Regular Budget resources.

CEPIS should develop an appropriate resource mobilization strategy as well as a permanent internal capacity for resource mobilization that would originate and coordinate efforts on behalf of CEPIS with the support of the HEP Division and Office of External Relations. Developing this capacity would require additional funding. This could be achieved by either a redirection of CEPIS resources or additional funding approved by the Director of PAHO.

The merger of two different technological cultures is not easy, even in private industry. We feel that the construction of a "new" CEPIS is still a work in progress which deserves the support of an external advisory body.

9. **Recommendations**

9.1 **On effectiveness and relevance**

- CEPIS should engage in a strategic planning/futures exercise in the context of the HEP Division.
- CEPIS should create a unit to promote and market the center and to mobilize additional financial resources.
- CEPIS should continue to reorient its work to place a greater emphasis on working with governments on environmental policy and put less effort into solving technical problems and providing local-level technical advice and support.
- CEPIS needs to evolve progressively from a reactive to a proactive mode by establishing consultation processes and internal mechanisms for *a priori* consultation with PAHO country offices.
- The Center needs to keep the Caribbean more informed of its activities and address its particular issues so that the Caribbean can benefit more from CEPIS’ services, particularly laboratory training.

9.2 **On management**

- CEPIS should adopt a more formalized management structure with regular meetings, formal reviews of progress, and records of decisions.
CEPIS should develop a medium-term strategic plan showing key directions it wishes to pursue and supported by a detailed business plan and a risk-management strategy.

CEPIS should regularly produce exception reports which show which projects have been delayed or are running over budget and noting any remedial actions.

CEPIS has developed guidance on project design but more consideration needs to be given to methods of achieving objectives, managing risks, and communicating results.

CEPIS should establish a more formal system for reviewing the quality of its products and activities, evaluating major projects, and considering the results of such reviews.

Staff development needs to be given a higher profile, with all staff being set annual professional-development targets.

CEPIS needs to seek vigorously to diversify its sources of extrabudgetary funds, particularly by making potential funding bodies more aware of the impacts CEPIS’ work has on alleviating poverty, for example, among indigenous populations and people living in rural or urban-marginalized areas.

CEPIS’ laboratory should continue emphasizing a wider marketing for its accreditation services beyond the current range of countries.

There should be a shift in the internal allocation of resources so that professional staff have increased resources for proactive work.

9.3 On the CEPIS-ECO merger

The strengthening of the process toward the creation of a “new,” more catalytic CEPIS recommended by the 1998 Special Advisory Group, should be fostered by the establishment of an Advisory Committee reporting to the HEP Division Director and through him/her to the Director, PAHO. This Advisory Committee would advise the HEP Division on technical and policy aspects concerning the continuing building of a “new” CEPIS reflecting the anticipated evolution of the health and environment field in the Americas. The Committee should meet at least once a year under a rotating chairmanship. The Director of PAHO would appoint its members upon the recommendation of the HEP Division, for limited, staggered, but potentially renewable terms. Care should be taken that at all times its membership should be balanced between veteran international professionals
from the sanitary engineering field, and from the environmental epidemiology, toxicology, and human-health risk assessment fields. The CEPIS Director would be an ex officio member of the Committee. CEPIS staff should provide the Committee's secretariat support.

- CEPIS should seek innovative ways of helping the people of the Region develop a better understanding of environmental health risks. As a first step in the process, CEPIS should develop a strategic plan to show what it intends to do and nurture links with key regional print and television journalists to ensure that environmental issues obtain a higher media profile.

- CEPIS should monitor major development projects in the Region, alert Member States to the need to carry out environmental health assessments, and disseminate good practice guidelines.

- CEPIS should produce more guides and teaching materials to assist countries in developing sustainable development plans and make these materials widely accessible in the PAHO official languages.

- CEPIS should fill any vacancies in areas related to environmental epidemiology, toxicology, and human-health risk assessment as soon as feasible.

10. **Action by the Pan American Sanitary Conference**

The 130th Session of the Executive Committee discussed the summary and the full evaluation report, finding it a very informative, helpful document, and a very useful exercise for the Pan American Sanitary Bureau, and requested a written management response to the recommendations of the evaluation of CEPIS.

The Pan American Sanitary Conference is invited to discuss this summary and the full evaluation report, consider the annexed Resolution CE130.R15 recommended by the Executive Committee, and indicate to the Bureau future steps in relation to these issues.

Annex
RESOLUTION

CE130.R15

EVALUATION OF THE PAN AMERICAN CENTER FOR SANITARY ENGINEERING AND ENVIRONMENTAL SCIENCES (CEPIS)

THE 130th SESSION OF THE EXECUTIVE COMMITTEE,

Having seen Document CE130/19, Evaluation of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS),

RESOLVES:

To recommend to the Pan American Sanitary Conference the adoption of a resolution along the following lines:

THE 26th PAN AMERICAN SANITARY CONFERENCE,

Having seen Document CSP26/17, Evaluation of the Pan American Center for Sanitary Engineering and Environmental Sciences (CEPIS);

Aware of the full internal evaluation report submitted by the evaluation team to the Director contained in Technical Report OPS/DAP/02.5.44;

Bearing in mind Resolution CSP20.R31 of the 20th Pan American Sanitary Conference, requesting the Director to carry out a regular evaluation of each of the Pan American Centers;

Noting with satisfaction that this process has entered a new and expanded stage with the evaluation of CEPIS;
Aware of the recommendations that the internal evaluation team has presented to the Director;

Recalling the discussions on the topic of the Centers at recent sessions of the Subcommittee on Planning and Programming and of the Executive Committee; and

Noting the need to strengthen program evaluation throughout the Bureau,

**RESOLVES:**

1. To commend the Director for having carried out this comprehensive evaluation and for having reenergized the process of evaluation in general, and that of the Pan American Centers requested by the Conference in 1978.

2. To request the Director to:

   (a) implement the pertinent recommendations of the evaluation team to ensure the evolution of a strengthened CEPIS, able to serve better the current and emerging needs of Member States in the field of health and environment;

   (b) conduct a periodic comprehensive evaluation of one of the Pan American Centers each year;

   (c) strengthen the Bureau’s capacity for program evaluation;

   (d) promote the development of cooperation networks among CEPIS, the Collaborating Centers, and other institutions linked with health and the environment in the countries;

   (e) present a written management response to the recommendations of the evaluation of CEPIS and of other other Pan American Centers as they are evaluated.