REPORT OF THE
SECOND EXTERNAL MANAGEMENT REVIEW
OF THE INTERNATIONAL CENTER FOR AGRICULTURAL RESEARCH IN THE DRY AREAS (ICARDA)

Panel Members:
John Dillon
Chairperson
Jacob E. Hautaluoma
Dogan Sindiren
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CGIAR Secretariat
August 1988
August 31, 1988

Mr. W. David Hopper  
Chairman of the Consultative Group on  
International Agricultural Research  
The World Bank  
1818 H Street, N.W.  
Washington, D.C. 20433

Dear Mr. Hopper:

I take pleasure in submitting to you for the consideration of the CGIAR the report of the Second External Management Review (EMR) of ICARDA. The Group owes a debt of gratitude to Professor John Dillon who chaired the panel and the original panel members Dr. J. Hautoluoma and the late Dr. D. Sindiren. Thanks are also due to Mr. M. Wedeman, who took Dr. Sindiren's place on short notice, and to Dr. A. Thabit who provided much valued advice and assistance to the board and the panel on financial matters.

The board and management of ICARDA also deserve the Group's thanks for their full and open cooperation with the panel throughout the review. The board deserves special praise for its responsiveness to the panel's request for background information on about a dozen questions, which it promptly supplied to the panel through commissioning a special study. I will submit to you ICARDA's final response to the EMR when it becomes available. I would note and agree with Professor Dillon's remarks about the value of Mohamed Nour's participation, which came because of logistical problems somewhat late in the process.

There has been discussion of the possibility of confining the management review submitted to the Group to general considerations, and handling detailed and confidential issues in a separate management letter. In this case the panel chose to include all of its observations in the report, and no separate letter has been sent to the board or to you. Even so, the document is relatively brief, for which the panel deserves commendation. The recommendations are listed in order of priority. The panel estimates the cost of additional personnel requirements of its recommendations to be on the order of U.S.$270,000 per year.

A unique feature of this EMR and the accompanying External Program Review (EPR) is the joint chapter on research management. This chapter was written by the two panels and appears in both reports. This implements one of the suggestions of the TAC-CGIAR Secretariat paper on review processes.

Another new feature is the description of ICARDA's organizational culture. The chapter devoted to this subject reflects the panel's impressions at a transitional point in ICARDA's history when a new management team replaced the previous leadership. The panel presents what it regards as the strong features of ICARDA's culture as a backdrop to the
rest of the report, not with the intention of passing judgment on the appropriateness of a specific shared value, norm or behavior.

Four aspects of this review have wider significance within CGIAR as well as importance for ICARDA, and deserve special comment.

First, this is one of several management reviews which have been quite critical of various aspects of management in centers with good program performance. Several conclusions might flow from this observation. It may be that the same performance could have been achieved more cheaply, or better performance with the same resources, had the management been better. It is also possible, that the impact of some kinds of management problems on performance is delayed, or that failure to achieve some of the objectives of good management, such as job satisfaction, organizational flexibility and high morale, can co-exist with good performance for extended periods if other conditions are favorable.

It is, of course, possible that in such cases the EMR, the EPR, or both are simply wrong. In the broad sense this is not very likely, since the evaluation criteria are usually explicit, and the data are openly stated and can be corrected by the center or others.

It is possible, however, that the assessment criteria used by the management panels do not fully capture the complexities of decision-making in the centers and, thus, objective, after-the-fact analysis of the results of these decisions overlooks the context in which decisions were made. If this is the case, making the management review a more collaborative exercise with the center could perhaps improve the review.

Second, like some of its predecessors, the ICARDA EMR puts more emphasis on management weaknesses than on strengths. For example, some impressive achievements, such as the building of the Tel Hadya complex under very difficult circumstances, are recognized but not commented on as extensively as areas that require improvement. The focus on problems reflects the appropriate emphasis the panel has placed on a forward-looking as compared with a backward-looking review.

Third, as this is the first time that a center has undergone a second management review, the panel was able to examine in detail the implementation of the recommendations of the first management review. The panel has concluded that no substantive action was taken on the recommendations until about two years after the Group discussed the first EMR. This brings up the question of what mechanisms the Group could use to monitor the implementation of review recommendations that are endorsed by the CGIAR. The following are possible monitoring measures the Group could consider:

-- to ask the center's board to report back to the CGIAR annually on the progress made in implementing EMR recommendations until they are substantially implemented;
-- to ask the CGIAR secretariat to monitor progress and to report to the CGIAR as long as necessary;

-- to ask the chairman of the most recent EMR to visit the center after a reasonable period of time and report his findings;

-- to commission an interim management review.

Fourth, some of the management constraints faced by ICARDA suggest that the Group should think very hard about locating the headquarters of a center in a country that is in a state of war and, therefore, puts high priority on security.

I suggest that you ask the Group to endorse the recommendations of the ICARDA EMR. As a follow-up measure it may be appropriate to commission an interim management review to be conducted by a small panel during the second half of 1990.

The ICARDA EMR is a good illustration of what a frank (bordering on blunt) management review can look like. I believe the center and our system are mature enough to benefit from such constructive criticism.

Sincerely yours,

Curtis Farrar
Executive Secretary
Dr. Curtis Farrar  
Executive Secretary  
CGIAR Secretariat  
The World Bank  
1818 H Street, N.W.  
Washington, D.C. 20433  
U.S.A.

Dear Dr. Farrar,

On behalf of the panel for the Second External Management Review (EMR) of ICARDA I take pleasure in submitting to you its report. The review was conducted at ICARDA in tandem with the External Program Review (EPR) during May 22 to June 10 1988, following preparatory work carried out earlier this year.

The review was performed in accordance with the objectives for management reviews generally set forth in the July 14, 1983 memorandum from the CGIAR Secretariat, "Procedures for Management Reviews of the Centers". The panel was asked to assess ICARDA's management effectiveness since the last EMR conducted in 1984 and give particular attention to the management implications of ICARDA's current thinking on its future strategy.

Compared to earlier EMRs, the panel was requested to:

(a) indicate clearer priorities among its recommendations;

(b) discuss more explicitly the cost implications of its recommendations;

(c) pay greater attention to creation of a managerial and administrative environment that is conducive to innovation;

(d) pay greater attention to the management issues concerning outposted staff and special/restricted core projects; and

(e) examine in greater depth aspects of organizational culture which have a strong bearing on performance.

The panel has responded to these concerns as follows:

(a) the panel has grouped and highlighted its key recommendations in the Conclusions and Recommendations section which opens the report. Together they merit ICARDA's close and immediate attention. For ease of reference, Appendix 1 of the report sets forth all our recommendations and suggestions.
(b) The cost implications of the panel's recommendations have been studied, particularly those forecasting additional personnel costs, estimated to be on the order of $280,000 per year. Other recommendations should over time generate cost savings. Details are presented in Appendix 2 of the report.

(c) A major focus of the panel was the managerial and administrative environment and whether it stimulates or inhibits innovation. The panel has recommended ICARDA take decisive measures to re-energize its commitment to innovation and change. These start with the installation of planning, budgeting and executing research by project, continue with the infusion of greater flexibility in program management, and finish with managerial and administrative reform to support and buttress research.

(d) The panel examined the matters of outposted staff and special/restricted core projects. Though no major problems were detected in these areas, a number of suggestions are made throughout the report.

(e) The report contains what we believe is a ground-breaking component for EMRs, i.e., a searching examination of the organizational culture of a center and how it relates to performance. The report's analysis suggests how problem-making features in an organization's culture can be influenced to promote problem solving.

To produce this report in such a short period of time required advice and assistance from many people and organizations: ICARDA management and staff, members of the Board of Trustees, donors, officials of the Government of the Syrian Arab Republic and ICARDA's national system partners. They all contributed in full measure and we thank them for it. In particular, we are especially grateful to ICARDA's Board and management for the expeditious way in which, before the formal review began in May 1988, they clarified a number of financial queries raised during our preliminary visit to the center in January 1988. This work was most ably done on behalf of the Board by Dr. Ahmed Thabit of the World Bank.

We thank Dr. Mohamed Nour, former Director General of ICARDA, for spending an afternoon with us in New York in August 1988. We found this meeting very informative and regret that his and the panel's schedules did not allow a meeting prior to the main phase of the review.

We are particularly appreciative to have had the benefit of the hard, concentrated, devoted work of Dr. Ahmed Thabit of the World Bank staff, who worked closely with us as a resource person in drafting the chapter on financial management. His help was critical because of the untimely death of Dr. Dogan Sindiren, who had brought to bear very considerable expertise and experience during our initial visit to the center.
We were in close and daily touch with the EPR panel. The chapter on research management is our joint product. Because some readers of this report may not have a copy of their report, we have inserted a copy of the Executive Summary of the EPR immediately following the Conclusions and Recommendations in our report.

Selcuk Ozgediz of the CGIAR Secretariat was our strong right hand, providing not only seasoned advice and counsel but also valuable insights and conceptual frameworks for our thinking and deliberations. Too, none of this report would have reached the printed page without the tireless, efficient and expert effort of Feroza Vatcha of the Secretariat and Parvin Damania of Aleppo. They did a fantastic job.

We firmly believe there are several system-wide implications to be looked at, messages to be sent and lessons to be learned from this EMR.

First, serious difficulties in transition arise when vacancies and changes occur simultaneously in top management positions, e.g. Director General and Financial Controller at ICARDA, and members of the Board of Trustees are untried and lack experience. In ICARDA one serious consequence of this was a degree of meddling by Board members in operational matters.

Second, a wealth of talent and experience exists in the centers. It ought to be widely shared. No center manages all activities expertly but each probably has a standout which other centers should be able to take advantage of. Therefore the system should strongly encourage the exchange of information on policy and procedure manuals and other ways of doing business; and perhaps selective staff secondments. Some of this is already occurring but it needs a concerted push. Each center will gain and the system will be the stronger.

Third, an idea has been bruited about for combining the EMR and EPR panels into a single effort. We strongly believe this is infeasible and will not produce anything positive other than some incidental but trivial cost savings. The fact the two panels are different contributes to their strength and effectiveness. Each brings a separate but not incompatible perspective to the two essential elements of success, good management and good research. To achieve both requires distinct skills, outlook and experience. To bring them together in a single review panel could well result in one submerging the other to the benefit of neither management nor research.

Fourth, the EMRs would be enormously enhanced by a self-evaluation being done by a center before the EMR panel starts its work. The self-evaluation should be planned and executed in an orderly, planned, systematic way with all the pertinent documentation assembled, collated and presented as an integrated package of material. This documentation, together with the center's evaluation of its managerial strengths and weaknesses, successes and failures, would be presented to the EMR panel before the review commences. The benefits would be threefold: enhance the dialogue of the center with the EMR, help the center improve its
performance and the EMR to round out the depth and usefulness of its report. The Secretariat could play an important role in helping centers institute internal self-evaluation systems.

Our work is done. My sincere personal thanks are due my colleagues on the review panel, Dogan Sindiren, Jack Hautaluoma and Miles Wedeman. They were expert and good company. We worked happily together. The review was educational and challenging for us as we hope it was for ICARDA. We and ICARDA have been frank and open with each other and we are optimistic our collaboration will bear fruit. We as a panel look forward to great progress being made before the next EMR is commissioned.

Sincerely,

John L. Dillon
Chairperson, ICARDA EMR
ICARDA is now a well-established center both physically and programmatically, thanks in large part to the prodigious efforts of its former Director General. Today, however, ICARDA is in a period of transition. A new Director General, Deputy Director General-Research and Financial Controller are recently in place. Much progress has been made in formulating a strategy more relevant to the needs of ICARDA's partners. The Board and management have taken some courageous steps to solve several long-standing problems, and are poised to do more.

A look back at ICARDA's managerial performance over the last four years shows that change is in order. ICARDA's program performance and infrastructural development, however, are not matched by its showing in the area of management per se. But disappointing performance in management has not yet seriously affected its effectiveness in research. If left unattended, however, management weaknesses must soon hamper program effectiveness.

The reasons for ICARDA's poor overall performance in management are many. First, many of the problems have their roots in ICARDA's managerial culture which is dominated by values and practices such as: strong (bordering-on-authoritarian) leadership; management by exception; decision-making by status or who you know; and attention to managing one's own unit well, at the expense of cooperation across units.

Second, the Board has not been a strong influence in generating change in management matters. This is, in part, because of the inexperience of the Board in management matters. The ability of the former Director General to keep the Board satisfied appears to be another reason.

Third, the center has not managed its resources as effectively and efficiently as expected from CGIAR centers. This conclusion applies to management of human, financial and physical resources.

In the area of finance, while an Audit Committee of the Board is now proposed, there are as yet no internal auditor, no Board-approved investment policy, no Board-approved fund raising and financial management strategy, and no up-to-date fixed-assets registry system. The financial unit is not working well as a team, and the services provided to other parts of the center are not timely.

Regarding personnel matters, a modern and forward-looking human resource management approach, rather than a purely clerical function, is badly needed. Personnel matters have suffered from lack of professionally qualified leadership.

Many administrative units, responsible for managing the center's physical resources, work inefficiently. An exception is the Purchasing and Supplies Department, which according to most reports is credited as a high
quality operation. We were especially concerned about the imputation of less than professional behavior, or at best poor judgement, concerning managers and officers in administration.

Another area we examined is the management of information. We are concerned about ICARDA's isolation from the rest of the world in terms of computer communication. Lack of electronic communication with the international scientific community can lead to degradation of staff quality and performance in the long run.

The way out is to bring ICARDA's managerial performance to a par with its excellence in research. This requires commitment to a serious management reform. Our report illustrates the types of actions ICARDA should take to initiate such a reform. The most important of these actions, which are stated in the report as our strong recommendations, are listed below. These and the remainder of our recommendations and suggestions are listed in Appendix 1.

We strongly recommend:

- ICARDA, as part of formulating its long-term strategy, determine the values that should guide the institution as it moves into the future.

- the Board take immediate steps to strengthen its performance.

- ICARDA institute a project budgeting system and assign a significant degree of budgetary authority to project leaders.

- ICARDA consider establishing a new Deputy Director General position in place of the DDG-International Cooperation and designate it as "DDG-Operations" or "DDG-Management".

- a qualified internal auditor with responsibility for both financial and operational auditing be appointed without delay.

- the Board establish an Audit Committee without delay.

- the appointment of an internationally recruited human resources manager to head the personnel unit.

- ICARDA (i) prepare and adopt a comprehensive table of organization establishing the precise numbers, salary categories and job descriptions needed for each organizational unit; (ii) classify all positions by content and job title; (iii) fill all vacancies in authorized positions only in accordance with normal recruitment procedures; (iv) effect transfers only in accordance with the policies and procedures for filling vacancies; and (v) stipulate promotions can only take place in the same fashion or, in special circumstances, on the basis of "present incumbent only".
- ICARDA develop and put into operation a comprehensive performance appraisal system.

- Physical Plant Department be headed by a person with F-level experience and qualifications.

- continued efforts to loosen the Syrian restrictions on ICARDA computing and electronic data transfer, including access to CGNET.
ICARDA completes the first decade of its existence. It is at an important crossroad, developing its strategy for the coming decade and its first five-year research programme. At the same time considerable changes are taking place in its senior management.

After a difficult period during its inception, ICARDA is now firmly established as an international agricultural research centre dedicated to high-quality work, and with an evolving record of research results. ICARDA's impact in the region of its mandate, West Asia and North Africa, is becoming visible in national agricultural research systems. These systems consider ICARDA as "their" Centre.

Strategies and Priorities

The third draft of a strategic plan of ICARDA for the coming decade was assessed by the Panel. Although the draft contains all the major elements needed to shape ICARDA's future programme and priorities, further refinement is needed to make it more explicit. The conceptual framework to be established by the plan needs to be supported by more analytical evidence for the choices being made. ICARDA should be explicit about these choices, and establish a clear vision of the exact nature of its intended contribution.

The strategy and future priorities have to recognise that ICARDA's mandate for dry areas precludes the Centre from making major contributions in the more favourable areas of the WANA region, despite the indisputable fact that it is those areas from which significant increases in food production must come. Risk aversion, stress tolerance, sustainability and resource conservation must have higher ratings in its research than food production per se, if the Centre is to truly fulfil its mandate.

Mandate

ICARDA's mandate is as valid today as it was a decade ago. It must be more vigorously interpreted in its operational part, by focusing research on the winter-rainfed dryland farming systems in order that they be ecologically and economically sustainable. The Panel confirms that irrigated farming should not be ICARDA's concern. However, research on water harvesting and supplemental irrigation must be included as the primary consideration for sustainability, and the efficiency of water use.

Concerning the specific crops in ICARDA's mandate, the Panel gave particular consideration to lentils and faba beans. It concludes that research on the improvement of lentil should continue in the meantime, recognising also its importance as livestock feed in the region.
For faba beans, the CGIAR decision to discontinue improvement work in ICARDA should be implemented, while maintaining the custody of its germplasm through a senior staff position in the Genetic Resources Programme. ICARDA should identify another international or national organisation to assume support for the research programme.

Research and Research Balance

Research at ICARDA is generally of a high standard, and comparable to that of other CGIAR Centres. Important research results have been achieved, most obviously in cereals and in food legumes, but also in other areas related to pasture legumes, and in farm resource management.

There are however some apparent imbalances between research areas. Socio-economic research appears to be under-staffed for a Centre working with a farming systems perspective. Comparison of research strengths between the three main components of dryland farming systems of the region, cereals, food legumes and livestock, suggests a significant over-investment in food legumes, and a contrasting under-investment in livestock research.

The Panel recommends redressing this imbalance by reducing research in food legumes, and strengthening socio-economic and livestock research.

Upstream Research

ICARDA has forged a large number of research contracts and collaborative links with other institutions to capture advances in basic research relevant to its various research programmes. ICARDA has started to establish a biotechnological laboratory. Plans exist to use genetically engineered rhizobia in collaboration with respective laboratories to improve the sitonia-resistance of nodules.

ICARDA should continue to monitor any new developments in relevant basic research for possible use in its core research programme. Any move upstream, such as the further development of cell biology and molecular genetics should be driven entirely by the need to solve problems, rather than a desire to use exciting new technologies. In the use of genetically engineered organisms, ICARDA must have the necessary security measures in place and be careful to monitor any legislation or regulations in its partner countries.

Research Management and Organisation

In developing a new strategy and moving into its second decade, ICARDA must review its research management and organisation. The EPR and EMR, having jointly considered ICARDA's present organisation, make a number of recommendations in order to strengthen overall research management, to introduce greater flexibility for interdisciplinary collaboration, to address new programme priorities more effectively, and to ensure unity of ICARDA's research effort.
Building on the present strength of the five research programmes, a matrix organisation is recommended to evolve with research thrusts or themes as the second dimension. A project-based management and budget system is also recommended to facilitate collaboration across programmes, to strengthen the authority of project leaders and improve research planning, budgeting and monitoring.

In order to ensure unity in ICARDA’s overall research effort, irrespective of whether it is undertaken at headquarters or in a country of the region, most of the present responsibilities of the DDG-IC should be brought under the DDG-R. Furthermore, improvement is needed in the planning and review processes for research, and in the committee structure serving internal coordination and support services.

**Cooperation with national programmes and decentralisation**

ICARDA has an excellent record in working with national programmes; this is seen as one of its particular strengths. For the future there is the need to organise this cooperation more systematically as part of a unified research programme of ICARDA. Networks constitute an important component of such cooperation, but need to be focussed on particular problems or techniques. They also facilitate division of labour between national institutions and ICARDA in working together towards common research objectives.

ICARDA has started to decentralise part of its research programme towards strategic locations in the region. This move should be strongly pursued. It allows ICARDA’s research programme a wider ecological coverage and catalyzes interdisciplinary research approaches in national programmes. The diversity and complexity of the WANA region calls particularly for such a stronger research decentralisation.

**RECOMMENDATIONS**

The Panel recommends:

- that ICARDA review the staff resources devoted to the agro-ecological characterisation project to ensure that sufficient priority is accorded within the programme to bring the project to a timely completion and facilitate the transfer of the techniques to national programmes, as appropriate;

- that a full-time core (P-level) position for a social anthropologist be added to the FRMP, and that provision be made for increased research assistance for the socio-economic group;

- that, in view of the importance of livestock in the future programme of ICARDA, one of the current (P-level) economics positions be assigned to work on livestock production systems, and that this position be transferred from FRMP to PFLP;
that research on annual pasture legumes, grazing management and livestock husbandry be extended to important farming systems outside Syria;

that mixed-species herds and genotypes of different production potentials be included in research on management of livestock and feed resources to obtain substantial increases in milk and meat;

that the number of livestock scientists be increased by two additional P-level positions;

that ICARDA and CIMMYT re-examine, as a matter of urgency, their respective stances on wheat improvement in the WANA region, taking a long-term view of the strengths of national programmes and the shifts in emphasis of their own research. They should strive to reach formal agreement as soon as possible, incorporating all aspects of work on wheat by both Centres in the WANA region;

that ICARDA undertake an analysis of existing evidence on the value of legumes in production systems of the region with respect to both their contribution to soil fertility under stressful conditions, and the possibilities of expansion in their use as livestock feed. The results of this analysis should be used to determine ICARDA's strategy for future research on food and forage legumes;

that work on lentil improvement be continued at the present level for two years and, in addition, that ICARDA immediately embark on an in-depth assessment of the potential pay-off of further investment in the improvement of lentil (taking into account the contribution to human nutrition, foreign trade and the sustainability of production systems in the region) in order to determine the appropriate allocation of its resources;

that ICARDA proceed to implement the CGIAR decision on faba bean as expeditiously as possible;

that ICARDA review the overall staff requirements and the distribution of responsibilities in the Genetic Resources Programme and its associated laboratories. Any deficiencies in staffing should be brought to the attention of TAC, which has accorded high priority to work on genetic resources and related seed health activities;

that before ICARDA enters into a contract involving special project funds, there should be an appraisal of a proposal in relation to ICARDA's mandated responsibilities, the likely contribution to the Centre's research programme, and the effects on the intended beneficiaries. All proposals should be examined against pre-determined criteria listed in Annex VII;

that special fund projects should, in addition to making a contribution to overheads, be required to make a financial contribution to the core activities of the centre directly related with the objectives of the
project. The Centre should consider making a matching supplementary contribution;

- that since the needs of national systems for the effective development and operation of the sub-regional networks drive the training priorities, this should be explicitly recognised in ICARDA's strategy;

- that ICARDA establish a Publications Committee with an initial task of developing a publications policy;

- that ICARDA consider introducing a matrix structure for organising its future research work. The dimensions of the matrix should be determined as ICARDA's strategic directions are identified;

- that ICARDA critically assess the suitability of its current monitoring and review systems to its future needs, in the light of its strategic plan, medium-term programme, and project-based matrix management system.
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1. ICARDA TODAY

As a CGIAR center, ICARDA is expected to be an institution of excellence in research and training working in partnership with national agricultural research systems to serve their needs and foster their development. How well this expectation is facilitated by ICARDA's management, and how the center's performance and degree of excellence might be improved from a managerial perspective, are the subject of this report of its second EMR. 1/

1.1. Evolution of the Center

ICARDA's first EMR was held in 1984, a year after its first EPR. The period since has been one of significant change. In August 1987 the center moved into its new headquarters at the Tel Hadya station, a half-hour drive from Aleppo. No longer is the headquarters' activity scattered across several sites in Aleppo and at the station. Also, since 1984, total change has occurred in the occupancy of its five most important management positions where departures and arrivals have been as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Departure</th>
<th>Arrival</th>
</tr>
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<tbody>
<tr>
<td>Director General</td>
<td>October 1987</td>
<td>March 1988</td>
</tr>
<tr>
<td>Deputy Director General (Research)</td>
<td>December 1986</td>
<td>August 1987</td>
</tr>
<tr>
<td>Deputy Director General (International Cooperation)</td>
<td>November 1984</td>
<td>February 1985</td>
</tr>
<tr>
<td>Director of Administration</td>
<td>August 1983</td>
<td>October 1986</td>
</tr>
<tr>
<td>Financial Controller 2/</td>
<td>August 1987</td>
<td>June 1988</td>
</tr>
</tbody>
</table>

There has, however, been no change to the structural organization of top management since the first EMR. Then, as now, the last four positions listed above, together with the Assistant Director General for Government Liaison and the Director of Computer Services, report directly to the Director General.

ICARDA's total staffing has grown by 20% (from 615 to 740 persons) over the period May 1984 to May 1988; senior international staff has grown by 47% (from 47 to 69), half of this growth being special project funded

1/ The conduct of the review is outlined in Appendix 5.

2/ In addition, the previous incumbent was on sabattical leave for about a year during 1985-86.
Twenty three nationalities are currently represented among the 53 senior international staff, two of whom are women.

Table 1.1. ICARDA's Staff Numbers in 1984 and 1988

<table>
<thead>
<tr>
<th>Category</th>
<th>Core Funded</th>
<th>Special Project Funded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>42</td>
<td>53</td>
<td>5</td>
</tr>
<tr>
<td>Q2</td>
<td>24</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>Q1</td>
<td>33</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>S</td>
<td>132</td>
<td>160</td>
<td>2</td>
</tr>
<tr>
<td>T</td>
<td>365</td>
<td>401</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>596</td>
<td>675</td>
<td>19</td>
</tr>
</tbody>
</table>

Doubtless due to the relative attractiveness of their salaries, turnover among local staff has been very low. Turnover among international staff below the directorate level has also been low, as would be expected in a relatively young center just entering its second decade. What is evident, however, is the developing strength of ICARDA's research and training activities since the time of the center's first external reviews, along with an ambience of greater maturity and self-confidence among its scientists. Today, as compared to four or five years ago, by virtue of its research, training and cooperative activities, ICARDA is both better known and better respected in its region and beyond. Concurrently, its partnership activities with national institutions relative to both its regional orientation to West Asia and North Africa and its global mandate for barley, faba bean and lentil have grown significantly. This growth in its partnership activity well reflects not only the positive perception of ICARDA held by its national partners but also the maturity, modesty and willingness to learn and adapt now displayed by ICARDA. In this regard, it must be rated high among the centers of the CGIAR system. Too, it should be recorded that, thanks to the persistent efforts of ICARDA's previous Director General, the center's international nature has been maintained despite significant pressures to divert its internationality.

As discussed in more detail in other chapters of this report, ICARDA's positive development in its scientific activities since 1984 has not been matched on the management side. Rather, until recently, the reverse process has occurred with obvious slippage in performance from a managerial perspective. To varying degree, this has been recognized by ICARDA's management over the last six months or so. Important steps have already
been taken or are underway to rectify the situation. Most significant have been the arrival of the new Director General in March 1988, his initiative in the drafting of a revised personnel policy soon to go to the center's Board, and his implementation on June 1, 1988 of a policy to pay local staff salaries in Syrian pounds not denominated on a dollar base. Both these initiatives ought to help solve problems that have bedevilled the center's management and Board in recent years. Also of significance is the Board's decision of January 1988 to cease the importation of Syrian currency at the end of 1988, thereby breaking the nexus between exchange gains and the perception of local staff that they should share in them. Not least, since the arrival of the new Deputy Director General (Research) in August 1987, the center has been developing its first-ever strategic plan which will set the guidelines for ICARDA's future work. As a final item in this list of important recent developments, June 1988 saw the arrival of the new Financial Controller. Much rests on him to provide strong professional leadership in financial management and control.

Today, with a full management team in place for the first time since August 1983, and decisions already made on a number of major issues, ICARDA's management is well poised to meet the challenge of obtaining top marks from its next EMR. Success in this challenge, we believe, will be essential to maintaining the current high standard and positive development of ICARDA's scientific activities.

1.2. ICARDA's Linkages  

In its host-country Syria, the Ministry of Planning is ICARDA's official avenue of contact to government; the center's cooperative work, however, is mainly with the Ministry of Agriculture and Agrarian Reform. Deputy Ministers of both these agencies sit on ICARDA's Board. The ministries have been helpful to ICARDA, and the relationship with the Syrian government has generally been good. After some earlier criticism, ICARDA is now viewed as producing results useful to Syria. A liaison committee is being established which will include representatives of relevant Syrian agencies and ICARDA. It will plan an annual research conference on collaborative needs and activities.

Another organization ICARDA is linked with in Syria is the Arab Center for Studies of Arid Zones and Dry Lands (ACSAD), a regional organization funded by the Arab League. Its research interests complement ICARDA's. The two centers have a collaborative agreement and relationships between them are becoming better. They have so far done little collaborative research but firm plans are now being developed.

Another somewhat undeveloped linkage is that between ICARDA and Syrian universities. Although agreements have been made or are being developed for cooperative activities, little seems to have actually happened. ICARDA

3/ We have left the question of ICARDA's linkages in research with its sister centers and the larger scientific community to the EPR to comment upon.
perhaps needs to play a more active role in exploring mutually satisfactory cooperative arrangements.

Equally important as ICARDA's linkages with Syria are its linkages with the other national agricultural research systems (NARS) in its region and, for its mandate crops, beyond. Both the emphasis on and the qualities of these relationships are strengths of ICARDA. The center has an impressive list of cooperative projects with NARS and has well assisted their development. In doing so it has been quite innovative, as evidenced by a willingness to place its staff, in the case of Ethiopia, within the administrative structure of the national system.

With its donors, ICARDA appears to have good relations. Their number has increased from 29 in 1983 to 40 in 1987, thanks to the efforts of the previous Director General, but the center is still reliant on USAID and the World Bank for some 40% of its total support.

Overall, our assessment is that ICARDA has no major problems in its host country, donor and NARS linkages and relationships. We found a few scabs but no running sores. The question remains as to whether ICARDA could do better. We think it could. Currently, the technical relationships in terms of collaborative research with its partners, training activities, submission of reports, etc. are handled well. Except for the case of training, however, we found little evidence that ICARDA is externally oriented in the sense of managing its relations with its environments in an anticipatory and planned way. While opportunities have been well taken (for example, the recent meeting with NARS as part of the center's strategic planning exercise and the hosting of significant international workshops), opportunities also need to be recognized, even created. We believe ICARDA would profit from having a more anticipatory and more global strategy for linkages and relationships with its environment; an approach which would continuously force the center to ask itself such questions as: What is ICARDA's environment? Who are the center's key stakeholders? What opportunities exist? What opportunities can be created? What niches can ICARDA fill? and Who should play what role?

1.3. ICARDA's Response to the 1984 EMR

ICARDA's first EMR was held in May 1984. By letter of September 25 of that year the then Board Chairman and Director General jointly informed the Chairman of the CGIAR of their concurrence with most of the EMR's recommendations, that many had already been implemented and that others were under consideration. Minutes of the Board meeting of May 1985 record that the then Director General informed the Board that the EMR's recommendations had received "prompt attention" and "corrective actions [had been] taken in the necessary areas".

Our judgement is that the center did not really begin to take substantive action to consider and act on the 1984 EMR report until the long-vacant Director of Administration position was filled in October 1986.
The more significant topics on which recommendations, suggestions or views were expressed by the 1984 EMR are tabulated below along with our brief comment on ICARDA's response.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational structure of support services</td>
<td>Significant action began in late 1986. Some aspects still under consideration.</td>
</tr>
<tr>
<td>Management training for staff</td>
<td>Consultant will assess needs in mid-1988. Four senior staff to attend CGIAR management course in July 1988.</td>
</tr>
<tr>
<td>Development of a comprehensive personnel policy</td>
<td>Reports of two consultants received in 1987. Draft policy now ready for Board consideration.</td>
</tr>
<tr>
<td>Job classification scheme</td>
<td>Board has approved proposal to appoint a long-term consultant.</td>
</tr>
<tr>
<td>Recruitment of an experienced personnel manager</td>
<td>Yet to be done.</td>
</tr>
<tr>
<td>Appointment of an internal auditor</td>
<td>Not yet done.</td>
</tr>
<tr>
<td>Accelerated completion of new headquarters building by late 1985</td>
<td>Building was occupied in August 1987.</td>
</tr>
<tr>
<td>Trainee accommodation</td>
<td>Funds not yet available.</td>
</tr>
<tr>
<td>Staff housing</td>
<td>To be included in Phase II of building program.</td>
</tr>
<tr>
<td>Use of &quot;off the shelf&quot; computer software</td>
<td>Additional action still needed.</td>
</tr>
<tr>
<td>Computerization of management information</td>
<td>Partly done.</td>
</tr>
<tr>
<td>Arabic translation</td>
<td>Senior level appointment made in early 1987.</td>
</tr>
<tr>
<td>Topic</td>
<td>Status</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Appointment of a training coordinator</td>
<td>Head of Training appointed in 1985.</td>
</tr>
<tr>
<td>Flexibility in farm labor contracts</td>
<td>Implemented in 1986.</td>
</tr>
<tr>
<td>Committee to decide farm land use</td>
<td>Implemented in 1985.</td>
</tr>
<tr>
<td>Vehicle assignment</td>
<td>Currently under review.</td>
</tr>
<tr>
<td>Machinery and vehicle workshops</td>
<td>An engineer appointed October 1984.</td>
</tr>
<tr>
<td></td>
<td>Consultant's report on organization received in June 1987.</td>
</tr>
<tr>
<td>Vehicle maintenance costs</td>
<td>Awaiting implementation of cost accounting system.</td>
</tr>
<tr>
<td>House maintenance in Aleppo</td>
<td>Mobile workshop facility is mooted.</td>
</tr>
<tr>
<td>Catering and cleaning</td>
<td>Cleaning contract negotiated in 1987.</td>
</tr>
<tr>
<td></td>
<td>Catering contract planned.</td>
</tr>
<tr>
<td></td>
<td>Cafeteria equipment was installed in 1987.</td>
</tr>
<tr>
<td>Appointment of a Director of Administration</td>
<td>Appointment made in October 1986.</td>
</tr>
</tbody>
</table>
2. ORGANIZATIONAL CULTURE

In examining the management of an organization, one soon has a sense of not being able fully to understand all the forces governing the organization's behavior. There seem to be undercurrents that are stronger than the more apparent and formal efforts of management. Several terms have been used to describe these unseen influences. One of them, organizational culture, has received a great deal of recent attention as an important determinant of organizational performance.

2.1. Definition of Organizational Culture

Organizational culture is perhaps best seen as the set of values, beliefs and rules for behavior that is shared by members of an organization. These characteristics develop over a long period and they persist over time. Some aspects of the organization's culture reflect the culture of its immediate societal environment and, especially in the case of ICARDA because it is an international organization, the many cultures of its employees. Other aspects are formed by the actions of the organization itself. Naturally, leaders help shape the culture. The history of the organization, highlighted by critical incidents, is important. Once formed, the culture takes on a life of its own and it guides or constrains organizational processes.

Understanding an organization's culture requires an assessment of three aspects of the organization: (i) its core values and beliefs, (ii) its norms or informal rules, and (iii) its climate. Assessment is difficult because one needs to make inferences about unseen aspects (such as values) from phenomena that can be observed.

Useful indicators of values and beliefs are stories, myths, rituals and descriptions of organizational heroes. One can see why the study of organizational culture is referred to as the "softer" side of management science.

Norms or informal rules can be assessed by observing behavior and reactions to them. Approvals or disapprovals of behavior, called sanctions, are evidence of the operation of a norm. Many behaviors carry information about norms, but those involving an instruction, a correction, praise, or a decision on a standard are particularly valuable sources.

The remaining element, organizational climate, has been extensively studied, but it does not have an agreed-upon definition. In general, the concept refers to the feelings exhibited by members about the organization. Examples of concepts assessed by measures of climate include positivity toward the organization, energy level or enthusiasm, collaboration and teamwork, commitment to achievement, feelings about the quality and quantity of work expected, and feelings about the rewards available from the organization.
2.2. Studying ICARDA's Organizational Culture

The study of organizational culture is new to the EMRs. The last management review conducted before the ICARDA EMR, that of IRRI, made brief reference to aspects of that institute's organizational culture. We explore culture questions more deeply, with the aim of drawing a portrait of ICARDA which can serve as a backdrop to the remainder of our report.

There is no single, commonly accepted methodology for studying organizational culture. Generalizations about values and beliefs, norms, and organizational climate have to be derived from empirical observations. Specially designed questionnaire surveys can help, but these are impractical within the constraints of carrying out a management review. Thus, as with our other observations about ICARDA, the views we express on culture are based on interviews, review of documents and policies, and observations of behavior at the headquarters and field locations.

We should state at the outset that a cultural characteristic often serves as a two-edged sword. It can reinforce some aspects of organizational performance while acting as a barrier to others. Belief in strong departmental autonomy, for example, can facilitate the management of individual departments, while at the same time hindering inter-departmental coordination. Thus, one should not reach quick conclusions about whether a particular cultural element is good or bad for the organization.

2.3. ICARDA's Organizational Climate

Its staff are moderately committed to ICARDA, partly because it selected good people early and because it pays better than other organizations. Generally speaking, the scientists and their staff work hard. However, this commitment to the center has started to erode and there is now significant discontent among the senior scientific staff, particularly Syrians, because of a perceived erosion of their base salary and benefits over recent years. Salary and benefits are a pervading topic of conversation.

Overall, there is a sense of frustration and factionalism, rather than a concern for ICARDA as a whole. The organization does not appear to be a cohesive institution. We did not get a strong sense of teamwork within or across units. The existing teamwork is stronger in the science area than in administration. There is suspicion of the motives of some of the administrators and many scientists resent the existing power structure which they believe makes them subordinate to the administrators. On the other hand, some administrators believe that the scientists are spoiled and expect too much of the administrators. The computing services unit is often singled out as being uncooperative and playing favorites. It sees itself as understaffed and overworked.

Morale is low in many segments of the organization. Staff cite as reasons the lack of objective decision-making based on policies and the
importance of status in obtaining service. As one put it, "ICARDA has 700 employees and 750 policies".

There is resistance to change and a desire to maintain the status quo. The existing management systems, procedures and structures lead to safe but not innovative approaches to problem solving and strategy formulation. In general, there is a cautious approach to work in ICARDA, which is caused, among other reasons, by the existence of a tight national security system. The difficulties and barriers to communication with the outside world result in too few external influences on the center. ICARDA appears encapsulated and not infused enough with new ideas.

Excellence is an aspiration, particularly in science, and quality and work standards are emphasized (except in some administrative areas). The staff, however, do not feel recognized for good performance and poor performance is perceived to be often tolerated. Merit rewards have been arbitrarily used. The general view is that it is difficult to fire anyone.

Interest in cost saving has not been consistently exhibited by senior management and some Board members. It therefore seems alright to not practice efficiency. The image of ICARDA as an "American" institution persists and, along with it, the mentality of taking maximum advantage of a rich and bountiful organization.

Dissent or differences of opinion are not seen as well tolerated. One example we were given described how a senior manager ordered a staff member not to discuss an issue concerning the management of a unit with any Board member.

The general view is of a leadership style that has been personalistic, top-down and bureaucratic. It has not been collaborative. The situation could change under the new Director General.

We did not find gender-related issues to be a problem in the center.

2.4. Culture Themes

We probed the Center's culture further to explore the values, beliefs and norms which underlie the observations made on ICARDA's organizational climate. We note these below in the form of culture themes. The first four themes relate mainly to the science area and the rest to organization and management. The order of presentation is not important and the absence of certain themes suggests that these are not as widely shared as the ones mentioned.

- High quality research. This is an aspiration of almost everyone at ICARDA. The scientists and other support staff are proud of their work and usually put quality above other considerations. The extent to which the research actually is of high quality is a matter the concurrent EPR has commented upon.
- Becoming an international center of excellence. ICARDA seems to have a slight inferiority complex. It is a relatively new institution and is not as widely known internationally as some of the older IARCs. It is well known and respected in the region and has good potential to be known more widely.

- Client orientation. ICARDA staff are sincere in their commitment to helping national agricultural research systems of the region. There is strong concern for meeting the needs of poor farmers. The value of outreach is widely recognized. Frequent contacts with clients are encouraged. ICARDA's information outputs are geared towards the needs of its major clients.

- Focus on the farming system. ICARDA staff strongly believe that the agricultural research problems of the region need to be addressed with a farming system perspective. Integration of the work on individual commodities along farming system lines is an aspiration. There is strong commitment to working on farming systems where rainfall is a major production constraint.

- Strong (bordering on authoritarian) leadership. The history of ICARDA supports the value of having a very strong leader, almost a father figure, as the Director General. In the past this has had both positive and negative consequences. It allowed timely decision making during difficult periods in the center's formative years. It also created an excessive dependence of senior managers on the Director General and discouraged teamwork. There has been little consultation with affected persons before decisions were made.

- Management by exception. The former Director General and some other key managers have frequently responded to situational pressures with decisions which constituted exceptions to rules and policies. The pressures have come from many levels and directions, but a common response has been to override a formal policy on the ground that the particular pressure was unique. This has weakened the value of ICARDA policies and made their enforcement difficult.

- Decision-making by status or by who you know. One of the major complaints we heard about management was that it was not fair. When we asked what that meant, we were told that the "ICARDA way" of responding to requests was according to one's status relative to other persons making requests. This has led to criticism of the administration and of the way ICARDA handles its people. Practically everyone we interviewed made a strong plea for equity in the enforcement of policies.

- Manage your unit well, but pay little attention to cooperation across units. This rule encourages autonomy at the expense of greater integration of activities. It represents a safe rather than an effective approach to managing units. The relatively rigid program structure in research reinforces it and the current incentive structure does not reward cooperation.
2.5. Influencing Organizational Culture

We stated at the outset of this chapter that, once formed, an organization's culture tends to persevere. Although it is true that cultures are resistant to change, they are not static. They respond to influences, albeit generally slowly, and can take a new form. External pressures can influence an organization's culture (such as the present external reviews or new requirements from donors) by precipitating major organizational action. Of greater interest, however, are actions which ICARDA itself might take, if it desires to do so, to influence its culture.

**Change in the behavior of the Board and management.** Probably the most powerful means of changing ICARDA's organizational culture is through the behavior of its Board and management, following a good understanding of the current culture and an agreement on the desired culture. The Board and management must exemplify the values imbedded in the desired culture in their work, policies and other actions. The force for change is the leaders' modeling and demonstration of commitment to certain values. Behavior inconsistent with the desired values carries strong messages that the stated values are not the values in practice. The desired values must, naturally, be honest expressions of the leaders' personal values, otherwise inconsistencies will appear. The desired values can be stated and encouraged by the management and the Board, but they are validated as being true only if they are consistently seen in their behavior.

**Change in the structure of incentives.** The organization's reward system can be modified to reward desired behaviors. Rewarding publication in refereed journals, for example, would reinforce a particular type of research. Alternatively, a reward system based on the achievements of national partners would encourage a different type of activity.

**Change in staff.** Selecting people who appear to have the desired values, informing them of ICARDA's values, introducing them to the "ICARDA way" and rewarding them based on criteria matching the desired culture can generate cultural change. Restructuring the organization can also lead to cultural change.

**Commitment to staff.** Forward-looking human resource development policies and programs (in areas such as employee development, training, counseling, personal goal-setting, participative planning exercises and involvement in teams) demonstrate the organization's commitment to the welfare of its staff and help improve the staff's commitment to the organization.

**Strategic plan.** An organization's strategic plan should describe a vision of its future and its desired values. It should also provide the rationale for having particular desired values. The plan, therefore, can be an important tool for communicating the desired values and for creating a forum for discussing aspects of an organization's culture.
The culture-change mechanisms we have singled out above are not exhaustive. The circumstances of each organization are different, as are the types of culture change desired.

At the moment, ICARDA is about to make some critical choices about its future. The top management team is relatively new, the external reviews have just been completed, and a new long-term strategy is being prepared. These conditions are conducive to initiating cultural change. Thus, we strongly recommend that ICARDA, as part of formulating its long-term strategy, determine the values that should guide the institution as it moves into the future.
3. LEGAL STATUS AND GOVERNANCE

ICARDA's initial charter as a CGIAR center was formalized in 1975. It proposed that ICARDA have principal stations in Lebanon, Syria and Iran. Subsequent events dictated that it have only one real principal station. This is at Tel Hadya in Syria which has also become the center's headquarters.

3.1. Legal Status of ICARDA

ICARDA is an autonomous non-profit international institution governed by a Board of Trustees in accordance with the center's Charter and possessing full juridical personality. It is chartered by formal agreement under the laws of Syria, Lebanon and Iran. Through circumstance, ICARDA's agreement with the Government of the Syrian Arab Republic, signed in 1976, is today and for the foreseeable future the agreement of major operational significance.

The agreement with the Syrian Government is currently supplemented by a document published by ICARDA and appearing to be an amendment to the Syrian Law covering ICARDA's agreement with Syria. The document is dated June 1, 1985 and is somewhat peculiar, being written in conversational rather than legal style. It records the outcome of negotiations held with representatives of the Syrian Government in 1984. It does not bear the signature of the Chairperson of the Board but is signed by the Director General on behalf of the Board. ICARDA regards the document as an amendment to the initial agreement. It is the view of the panel (and of ICARDA's adviser in international law - whose view, it seems, never reached the Board) that the document, not having been formally approved by the Syrian legislature, does not have the status of an amendment to the initial agreement. Rather, its status is more that of a letter of understanding specifying ICARDA's and the Syrian Government's modus operandi on certain matters for the time being. Viewed in this context, it does give ICARDA a degree of flexibility that might not otherwise exist.

With its statements on serving the needs of the host country, the employment of nationals, local purchase, need for approval of recruitment of more than four months duration and addition of a second ex-officio Syrian Board member, the document seemingly favors the host country more than ICARDA. We recommend that the ICARDA Board seek expert legal advice on the status of its agreement with Syria and make a considered judgment on whether or not to seek its amendment in any regard. As a contingency measure, it would also be desirable for the Board to review the status of its agreements with Lebanon and Iran.

In 1979 the Board agreed that Article VIII para 2 of ICARDA's Charter should be amended to increase Board membership from "not more than fifteen trustees" to "eighteen members", i.e., no more or no less than 18, to be made up (it would seem, following the pattern of the initial Charter) of one trustee appointed by each government where a principal station is situated, the Director General of the center, three trustees appointed by
the CGIAR and twelve trustees appointed by the Board (Table 3.1). However, the Board minutes do not record any proposed rewording for Article VIII para 2, nor any delegation for one of its officers to do so. It must be questioned whether such change was in fact made though it was clearly the intention of the Board to do so and the CGIAR did agree to the proposal to have such a change. In implementing this change the Board also failed to recognize that it had resolved to have exactly 18 members and interpreted the requirement as "up to 18 members".

In 1985, pursuant to the supplementary document to the agreement with Syria discussed above, the Board agreed that Article VIII para 2(a) of the Charter be amended to read "Up to two trustees appointed by each government where a Principal Station is situated". Again the full text of the amended Article VIII para 2 was not spelt out in the minutes so that it is not feasible to determine if possibly necessary consequent change to other parts of Article VIII para 2 were made.

The copies of ICARDA's Charter provided to panel members contained none of the above changes to the membership structure of the Board.

None of the above-mentioned uncertainties with regard to amendment of the Syrian agreement and the Charter have affected the functioning of the Board. They are evidence, however, of a somewhat casual approach to fundamental aspects of the Board's governance.

ICARDA's Charter is supplemented by a by-law, the ambit of which covers both the functioning of the Board per se and of ICARDA as a corporate entity. In the view of the panel, this by-law is somewhat dated and ICARDA would be better served if (a) it were replaced by a revised set of by-laws relating specifically to the functioning of the Board and (b) matters relating to ICARDA as a corporate entity were specified either by a separate by-law or by resolution of the Board. Possible revision along these lines could be facilitated by reference to the analogous documents of some other CGIAR centers.

3.2. Performance of the Board

In the period since the 1984 EMR, the ICARDA Board has been burdened with a significant number of major issues in the areas of personnel and financial policy. The development of a strategic plan for the center has also been a major matter requiring the Board's input. It has also had to appoint a new Director General. Nor, over this period of 48 months from June 1984 to May 1988, was the Board's work made any easier by the fact that the center operated with an Acting Director General for five months, no Deputy Director General (Research) for eight months, no Deputy Director General (International Cooperation) for three months (he also acted as Director General for five months), no Director of Administration for 28 months and an Acting Financial Controller for 24 months. Among the center's top management, only the position of Assistant Director General for Government Liaison was occupied continuously.
Table 3.1 ICARDA Board of Trustees and their Terms of Office 1977 to 1988

<table>
<thead>
<tr>
<th>Name</th>
<th>Nationality</th>
<th>77</th>
<th>78</th>
<th>79</th>
<th>80</th>
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<td>Boukli, N</td>
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<td>x</td>
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Number of members: 13 13 12 13 15 16 14 13 15 15 18 18 17

* CG Nominee.
** Host-Country Nominee.
o Director General Ex-Officio.
/ Chairperson.
In such circumstances, despite the interest, dedication and hard work of some of its members, it is not surprising that the overall performance of ICARDA's Board since the 1984 EMR has been generally inadequate. In some ways, as exemplified by the maintenance of its independence in the new Director General's appointment process, the Board performed in exemplary fashion. In other ways, particularly in terms of untoward liaison with staff, breaking of confidentiality and failure to meet its audit responsibilities, the Board has performed very badly. This is now well recognized by the Board and a number of corrective actions, for example with regard to audit concerns, are now in process.

Review of the minutes of meetings of the Board and of its Executive Committee since the 1984 EMR, complemented by information gained from interviews during the panel's review process, gives the following assessment of the Board's performance in terms of particular functions and responsibilities typically expected of a CGIAR center's Board.

<table>
<thead>
<tr>
<th>Function/Responsibility</th>
<th>Comment on Performance</th>
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<tr>
<td>Selection of Director General</td>
<td>Some indecisiveness in making transition arrangements. Selection of new Director General done generally well. Board's independence maintained in the selection process. Only at insistence of senior scientists were they consulted on the profile of the desired appointee.</td>
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<tr>
<td>Appointment of external auditors; receipt of auditors' report.</td>
<td>Appointment process handled inadequately; formalities not observed; corporate changes to the audit firm went unnoticed; no audit plan received or proposed. Inadequacy of audit reports for 1985 and 1986 not recognized. Board minutes record no substantive discussion with the auditors and no meeting with them in the absence of the Director General and Financial Controller, nor is there any reference to the auditors' management letters.</td>
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<td>Mandate and program review, planning and monitoring; strategic planning.</td>
<td>Annual review and planning done reasonably adequately. Little contribution by some trustees. Not all trustees appear to have had the scientific respect of the center's senior scientists. Current strategic planning exercise, started in response to TAC requirements, has gone slowly but, thanks to staff input and that of the Board, is now well in hand. Board appears to have had no formal approval process for special project proposals.</td>
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<td>Formulation and monitoring of policy to be followed by center management.</td>
<td>No investment policy has been approved. Policies for other areas, such as personnel, housing, etc. have generally been put in place but, particularly in the personnel area, have allowed too much to the discretion of the Director General. Financial implications have sometimes not been adequately considered. Monitoring seems to have been</td>
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</table>
poorly done, e.g., not all purchases have been initiated through proper channels and purchase of services has not always been seen as a function of the Purchasing and Supplies Department. Worries and concerns of the Board appear to have been allayed by a persuasive Director General and Financial Controller. Recognition of this after their departure seemingly led to overreaction by the Board and excessive involvement in management. This is now recognized by the Board and is not expected to reoccur. Monitoring of the Director General's performance has not been an item on the Board's agenda. Little attention seems to have been paid to management's organizational structure.

Selection and orientation of members; monitoring of performance; members' attendance.

Nominating Committee is active. Except for lack of expertise in business/finance/law area, spread by discipline, nationality and region has been well balanced. More female members would be desirable. Membership currently lacks strong CGIAR experience. Insufficient emphasis on recruiting outstanding persons to serve in their individual capacities and too much emphasis on disciplinary, regional and donor considerations. Language has been a problem for some members but care is now exercised in this regard. Since 1985 members are replaced if they miss two consecutive meetings without acceptable reason; performance appears otherwise not to be monitored and re-election to a second term has been automatic. Exit interviews have not been held. The Board has not scheduled discussion of its role and performance as a regular item of business. Induction of new members has been weak. Over the period since the 1984 EMR the Board has had, on average, 1.8 vacancies among its 18 members. During this period the Board held six meetings with, on average, two members absent. Thus the Board, on average, has operated - at least in its formal processes - at 21% below its full numerical strength.

Board committees.

Nominating Committee has worked reasonably well on a year-to-year basis but more forward planning, attention to leadership needs and consideration of a member's first-term performance before re-election are needed. Program Committee performance has been uneven with some members often ill-prepared. Executive Committee has tended to be a mini-board within the Board. No Audit Committee is yet in place. Good use has been made of ad hoc committees.

Meeting agendas, minutes, documentation.

Board normally meets annually in April/May, the Program Committee in January and the Executive Committee biannually in March and November. Timely availability of documentation has been a perennial problem. Agendas appear to have been largely determined by the Director General and Board Secretary. Quality of the minutes has varied with some errors and omissions evident. Minutes frequently do not record the outcome of discussions.
Relationship with staff, clients, donors.

Relations with staff could be improved; better and more proper communication is needed; some members have breached confidentiality in discussions with staff, thereby making the Board's work more difficult. Through its membership and in conjunction with management, the Board has actively and well pursued good relations with clients and donors.

Responsiveness to CGIAR policies and reviews.

The Board has allowed ICARDA to be one of the last centers to implement the revised CGIAR budget procedures. Presentation of ICARDA's Board-approved financial accounts for 1985 and 1986 was not as transparent as it should have been. Despite the fact that the then Director General told the Board in May 1985 that "prompt attention was given to the recommendations of the Management Review [of May 1984] and corrective action taken in the necessary areas" (Minutes, 18th Meeting, Item 5), major matters relating to administrative structure, personnel policy and management, financial management and control, computing and vehicles still remain unresolved. Despite a plan to do so, the Board did not prepare any background reports for the present EMR. It did, however, act most expeditiously on a request by the panel for clarification of some issues before the EMR began.

ICARDA Annual Report

ICARDA's Annual Report is neither approved by the Board nor signed by its Chairperson.

3.3. Strengthening of Board Performance

The panel believes that strengthening of the performance of ICARDA's Board hinges significantly on:

- a better recognition by all Board members of their role and responsibilities, and in particular a recognition that as members of the Board their responsibility is to ICARDA and not to some outside constituency.

- election to the Board of some members variously encompassing proven team-leadership ability, experience in the CGIAR system and experience in the general area of business, finance and law.

- the addition of an Audit Committee, the rearrangement of Executive and Program Committee membership so that membership of one does not preclude membership of the other, and restriction of the activity of the Executive Committee so that it does not usurp the rights of the full Board.

- development of a revised and updated set of Board by-laws including, inter alia, updated terms of reference for the Board's committees.
- appraisal by the Board of its performance and dropping of the
tradition that mere attendance at meetings is sufficient grounds for
election to a second term.

We strongly recommend that the Board take immediate steps along the
lines suggested above to strengthen its performance. In doing so, we
recognize that many other considerations beyond those suggested above are
also important to Board performance.
ICARDA was conceived at its establishment as an interdisciplinary research center. Research programs were built up before proper physical facilities were available. Until 1987 the administrative offices were housed at a considerable distance from the main research site. Off-station research was developed at six other sites in Syria and two sites in Lebanon. In 1987 the new headquarter facilities allowed the housing of center management, administration and research facilities in one complex.

4.1. Research Organization at ICARDA

At the core of ICARDA's present organizational structure are four interdisciplinary research programs (Farm Resource Management; Cereal Improvement; Food Legume Improvement; Pasture, Forage and Livestock) and the Genetic Resources Program which is comparatively small. These research programs, together with Farm Operations and the Scientific and Technical Information Program (STIP) are under the supervision of the Deputy Director General (Research).

Each of the four major programs integrates various disciplines. Programs have their own laboratories, some of them jointly used by scientists of the same discipline from other programs or others providing services to all of the programs. Laboratory leadership and responsibility are established only for some. The phytopathological laboratory and the entomological laboratory, for example, are shared by the pathologists and the entomologists of the Cereal and Food Legume Improvement programs, and the microbiological laboratory by rhizobiologists of the Food Legume Improvement and Pasture, Forage and Livestock programs. The seed and plant chemical laboratory of the Farm Resource Program on the other hand serves all programs in inorganic analysis of soils and plants whereas the Cereal and Food Legume Improvement programs have separate quality laboratories for each program. The Genetic Resources Program provides major service functions for other programs by the genetic resources unit, the seed health laboratory and the virology laboratory. All programs link with Farm Operations which is responsible not only for Tel Hadya but also for all experimental sites in Syria and Lebanon.

The activities of ICARDA outside its research locations fall under the supervision of the Deputy Director General (International Cooperation). These include the Nile Valley Project and the MART/AZRI project in Baluchistan, the North African Regional Programs and all cooperative activities with NARS. Donor relations on program matters fall under the responsibility of the Deputy Director General (International Cooperation), yet donor-funded special projects are developed and administered by individual research program leaders. The Deputy Director General (International Cooperation) supervises the Training Coordination Unit responsible

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1/ This chapter was written jointly by the EPR and the EMR panels and appears in both reports.
for communication and arrangements for training with agencies and organizations outside ICARDA, as well as across research programs of the center. The seed production program also falls under the supervision of the Deputy Director General (International Cooperation).

Whereas the responsibilities of the Deputy Director General (International Cooperation) for donor relations and for the logistics of the center’s off-campus activities are clearly distinct from the responsibility of the Deputy Director General (Research), inevitably there are some areas of overlap. These are overcome by close collaboration between the two Deputy Director Generals. For all research matters the reporting of research staff, irrespective of their location, is with the research programs.

The Director General is advised in research management matters by three committees: The Management Committee (MC) composed of the Deputy Director General (Research), the Deputy Director General (International Cooperation), Assistant Director General for Government Liaison, Director of Administration and Financial Controller, and chaired by the Director General, is concerned with overall management issues including research. The Policy Advisory Committee (PAC) has been set up to advise the Director General on research policy. It originally included, besides top management, only the research program leaders. Through expansion to 19 members it has become essentially a committee for sharing information among senior staff. The Training and Research Advisory Committee (TRAC) under the chairmanship of the Deputy Director General (Research) is the most important instrument for research coordination. It includes the five program leaders, the Head of Training, the Head of STIP and the Director of Computer Services. It meets once a month to discuss center-wide issues of research, training, and research support. It also reviews all requests of research programs for capital expenditures.

For research support services such as laboratories, computer service and publications, no formal structure, such as a users committee exists so far. The establishment of a laboratory committee is under consideration. The Director of Computer Services has formed a committee under his chairmanship.

4.2. Criteria for Assessing Organizational Structure

ICARDA has an impressive record of achievements under the existing organizational structure. The structure has enabled ICARDA to develop strong research programs and a good international network for carrying out off-campus activities. Therefore, the current structure should not be dismissed lightly in exploring alternatives for the future.

In our view, five criteria are important for assessing the appropriateness of an organizational structure for research management, whether existing or under consideration:
It is highly desirable to have the organization's structure follow from its chosen strategy, not vice versa. (Although the existing structure almost always has a tendency to influence strategy.) The structure should facilitate implementation of the strategy. If the strategy calls for the center to carry out most of its activities in the field, for example, the structure should provide appropriate distribution of authority and coordination mechanisms to achieve this. Pragmatically, strategy and structure are developed together.

Integration of activities. Whatever the types of activity called for by the strategy, the structure should facilitate their linkage when coordination is necessary.

Linkages with the environment. The organization needs to maintain a good fit between itself and its immediate, albeit changing, environment. The structure should allocate authority and responsibility to improve the fit with clients, donors, host countries and other stakeholders.

Authority and responsibility of the scientist. If innovation is the name of the game in conducting research, the persons who are expected to innovate should have the authority to make decisions about their work. This calls for a decentralized structure delegated to the manager-scientist. At the same time, the structure should allow for the establishment of a clear system of accountability for the scientist.

Simplicity. The structure should have clear lines of authority and responsibility. It should have as few layers as possible so as to facilitate vertical communication.

In addition to the above, criteria which derive from the specific circumstances of an institution should also be taken into account. These include the size of the organization, its culture, and the competence and style of its managers.

4.3. ICARDA's Future Organizational Structure

How ICARDA modifies its organizational structure is its business. What we present here are some thoughts, based on the criteria outlined above, on alternatives ICARDA should consider in making its choices.

Matrix Organization. ICARDA has not yet finalized its long-term strategy, but it is already clear that ICARDA's research will need to focus on dimensions other than commodities, with greater clarity and cohesion than at present. One of these might be the themes (or clusters of problems) that cut across farming systems, such as efficiency of water use and the crop-livestock interaction, another might be the farming systems themselves.
We consider themes, disciplines, farming systems, and commodities to be the principal axes around which ICARDA's research organization might be structured.

However ICARDA eventually defines its strategy, we consider it will require a research management structure that will enable integration of research activities. In addition, greater coordination along disciplinary lines will allow the scientists in the same discipline to interact closely for furthering their disciplinary interests and capabilities.

We are not suggesting a four-dimensional matrix structure. This would be too complex to implement. However a two-dimensional matrix organizational structure appears desirable, with simpler (and informal) coordination mechanisms for integrating people and work along the remaining two dimensions. For sake of simplicity in what follows, we use the theme and discipline as the two dimensions of the matrix. This may or may not be ICARDA's choice after it completes its strategy.

ICARDA should proceed sequentially in establishing a matrix organization. It could start with a structure which uses on one dimension its current program department structure, and on the second dimension begin to identify key research themes for the dry areas of the region. This would not disrupt the current structure much and make it easier to shift to other dimensions later, if necessary. Coordination mechanisms along disciplinary lines can be introduced after some experience with the new structure. This could be in the form of disciplinary groups meeting informally and as necessary to exchange views and information on disciplinary topics of common interest.

We therefore recommend that ICARDA consider introducing a matrix structure for organising its future research work. The dimensions of the matrix should be determined as ICARDA's strategic directions are identified.

4.3.2. Project-based Management System. A matrix structure is necessary both because of the planned change in the focus of ICARDA's research and because of a need to move to a project-based management system. The latter is necessary because work on a project requires multi-disciplinary teams. A second reason is to decentralize authority, responsibility and accountability to the scientist-manager.

In the envisaged system a project would become the smallest organizational and budget unit. The projects would each have a finite life, specified budget, predefined outputs, and a management structure with a project leader and team members. Each scientist would have a natural home, perhaps one of the program departments, which would be his administrative base. He might work on one or more projects, perhaps in some as the project leader. Each scientist would report to his department head on all administrative matters, and his project leader(s) on project related matters. This dual reporting can cause friction and conflicts initially; this is one reason for maintaining the current program department structure as one of the axes of the matrix when the system is first implemented.
Projects would typically represent problems within a particular theme and coordination will be required to integrate the work within each theme. Some of the other CGIAR centers (notably CIP and ILCA) are using a "thrust coordinator" for this purpose. In both CIP and ILCA, the thrust coordinators report to the Director of Research, who coordinates work across the thrusts. The thrust coordinator can be a department head (i.e., a manager on the other axis of the matrix), the leader of the largest project within that thrust, or both.

We are not suggesting ICARDA should adopt the CIP or ILCA system. What we are pointing out is that there is need for an organizational mechanism for coordinating projects.

4.3.3. Project Budgeting. The effectiveness of the system described above depends to a large extent on the budgetary authority, and responsibility, of the project leaders. We are not prepared to suggest the specific path to be used in allocating resources. It could go directly from the Deputy Director General (Research) to the project leaders. In the context of a "theme" organized matrix, it could go to the theme (thrust) coordinators and on to the project leaders. Another alternative would be to allocate resources to program departments and through them to project leaders. A combination of the above could also be used, such as allocating overhead funds to program departments (the administrative home of the scientists) and research funds to project leaders. The option chosen depends on the exact form of the matrix and the coordination mechanisms instituted.

Without budgetary authority, project leaders would not have the autonomy needed to manage and be held accountable for their projects. Therefore, we strongly recommend that ICARDA institute a project budgeting system and assign a significant degree of budgetary authority to project leaders.

Establishing this system requires some changes in the accounting system, so that it can accommodate budgeting and periodic financial reporting needs on a project basis. It may also be necessary to modify the existing performance evaluation system, so that it can address the needs arising from dual (and sometimes more than dual) reporting. In addition, individual work planning will need to be tied more closely to project planning.

4.3.4. Unity of ICARDA's Research Effort. Wherever it is conducted, ICARDA's research work should be under one leadership. The recommended matrix system and the complexities it brings require that research and related activities undertaken outside of the headquarters be under the Deputy Director General (Research). This is not significantly different from the current practice at ICARDA, where off-campus project leaders report on project matters to their department at headquarters.

Under the envisioned system, the off-campus project leaders, like other project leaders, would have a multiple reporting responsibility. On project matters, they would report to the Deputy Director General (Research)
or the research theme or thrust coordinator, if any. On administrative matters they would report, as now, to the person responsible for international cooperation at the headquarters. This could be a direct reporting relationship (if there were no other project leaders in the same geographical area) or an indirect relationship (through a person designated as administrative coordinator for the geographic area, who could be a project leader). In addition to these, an off-campus project leader would need a natural home at the headquarters, even if he is "seconded" for administrative purposes and for a particular period to international cooperation. This practice would enable ICARDA to rotate outreach assignments among staff, which is an effective staff development technique.

A question remains on the most effective location for the Deputy Director General (International Cooperation) position. The current incumbent made significant contributions to ICARDA's international cooperation work, but is due to retire soon. He has excellent relationships with the Deputy Director General (Research), so research and administrative aspects of outreach activities are being coordinated effectively.

With the retirement of the Deputy Director General (International Cooperation), there is an opportunity to re-examine outreach coordination needs of the new strategy and its component projects. The option we favor is creating a "Coordinator-International Cooperation" post, reporting directly to the Deputy Director General (Research). This would help strengthen the unity of ICARDA's research and related work and allow assignment elsewhere of some activities (such as donor relations) carried out by the present Deputy Director General (International Cooperation). Thus, we recommend that ICARDA consider abolishing the Deputy Director General (International Cooperation) position after the retirement of the present incumbent and reassign most of its responsibilities to a newly created "Coordinator-International Cooperation" position reporting to the Deputy Director General (Research).

4.3.5. Committees. We have not studied carefully the role and effectiveness of the three ICARDA committees (MC, PAC and TRAC) involved in research management matters, particularly after the departure of the former Director General. The recommendations made above on structural matters will have an important bearing on the need for and the terms of reference and composition of these committees. We, therefore, suggest that the Director General review the existing committee structure in the light of other structural changes.

There is also a need for the Director General to examine the need for user committees for laboratories, publications and computer services. As a general rule, the head of a unit requiring a user committee should not be the chairperson of the committee.

4.3.6. Closing Comment on ICARDA's Research Structure. We would like to stress that our recommendations and suggestions on research structure are based on somewhat incomplete information on ICARDA's future strategy and some aspects of its internal environment. As our wording suggests, they are
a set of opinions shared by the two external review panels and are presented for consideration by ICARDA as it charts the course for its future.

4.4. Planning and Review Processes

ICARDA, like the other centers within the CGIAR system, has been moving gradually towards implementing an integrated planning process made up of three components: strategic planning, operational planning, and monitoring and control. Strategic planning has a long-term horizon and aims at clarifying goals and identifying strategic directions. Operational planning is both medium and short-term and attempts to translate ICARDA’s long-term strategy into programs and projects. Monitoring and control systems assess implementation of strategic and operational plans, and aid in replanning.

4.4.1. Strategic Planning. It has been less than a year since ICARDA started work on its strategic plan. Like most of the other CGIAR centers it had little experience in strategic planning; staff were used to preparing short- and medium-term program plans, without serious questioning of the rationale and the broad directions underlying these program plans.

The process was kicked off with a two-day seminar on the concept of and approaches to strategic planning in September 1987. ICARDA’s senior managers attended this seminar. They subsequently formed the internal team which prepared the successive drafts under the overall leadership of the Deputy Director General (Research).

The Board took keen interest in the formulation of ICARDA’s strategic plan. A Strategic Planning Committee of the Board was established under the leadership of the Chairman of the Board’s Program Committee. Also, several external consultants knowledgeable about ICARDA’s evolution and program structure were hired to assist with the planning effort.

A notable step was the dialogue ICARDA established with its primary clients regarding ICARDA’s strategy. A consultation was held with the leaders of the cooperating national programs in February 1988, in Viterbo, Italy.

Now, the plan is in its third draft and the EPR has commented on its content. It will be finalized following the discussion of the reviews by TAC.

We commend ICARDA for its seriousness in approaching strategic planning and the Deputy Director General (Research) for the leadership role he played throughout the process. The involvement of the Board and the national institutions is also praiseworthy. We realize that there are strong internal pressures for maintaining the status quo, because a major shift in strategy is likely to distort the present power balances. These pressures should be resisted. ICARDA’s future success is more important than an increase or decrease in the status of any unit or individual.
Strategic planning is not a one-shot exercise. Once this plan is completed, ICARDA should institute procedures for assessing the effectiveness of the strategy and for modifying it when necessary.

4.4.2. Operational Planning. ICARDA has not yet started medium-term operational planning. A five-year, medium-term program will be prepared following completion of the strategy and presented for approval to TAC and the CGIAR. This five-year program will specify ICARDA's essential and desirable activities, regardless of source of funding.

Operational planning at ICARDA follows primarily a bottom-up approach within each research program. It has been an exercise in two steps. The first step is the budget request for approval by the CGIAR which has to be prepared in the form of an annual Program of Work and Budget. This P&B is based on ongoing programs, taking into account activities which come to completion and new activities which are proposed to be added. It gives account of major program achievements and future program directions. Its content is based primarily on the requests of the research program leaders and is jointly prepared by an interactive process of senior staff and management. Preparation starts at the beginning of a calendar year. It is presented by the Director General for discussion to the Board's Program Committee and for approval to the Board of Trustees. TAC reviews this proposal in June and recommends it with a budget level to the CGIAR in late autumn. Final budget allocations by donors are regularly known during the first month of the year in which the program will be implemented.

Parallel to the process of approval of the P&B a more detailed programming is initiated. Each research program develops a list of projects in the form of annual research and training plans. This list includes ongoing projects proposed for continuation and new projects. Only some projects have a distinct time horizon and none have budget allocations. Each research program holds a planning conference in the fall of each year to review research results and discuss the research proposals for the coming year. As all programs have their planning meetings simultaneously, participation by scientists from other programs is limited. Members of the Program Committee of ICARDA's Board and some national program scientists are invited to these planning conferences.

Collaborative projects with national programs, conferences, workshops, international courses and training activities are also examined in these conferences whereas plans for collaborative projects with individual national programs are discussed in annual coordination meetings in each country.

National research program leaders and scientists influence the program planning process not only through their selective participation in the planning conferences but also through participation in workshops, visits, and informal contacts.

Each program submits its proposed Annual Research Training Plan through the Deputy Director General (Research) to the Director General for approval. The Board's Program Committee and the Board of Trustees are not
involved in the approval of Annual Research and Training Plans of the research programs. The approval of the detailed Annual Research and Training Plans for a given calendar year has coincided with the availability of the budget during the first month of each year.

After approval by the CGIAR, the budget is allocated by the Director General to each program. It is left to the research program leaders to decide on the resource allocations within each program. ICARDA has no mechanism to monitor resource allocations within research programs. The budgeting and resource allocation process is limited to operational funds. For capital expenditure, a lump sum is reserved for the whole center which does not reflect the actual requirements for replacement and new acquisition of equipment.

The planning and budgeting process described above will need to be modified when ICARDA moves into medium-term programming. Also, the introduction of a project-based matrix management system will change the nature of operational planning. The medium-term program will set the broad parameters for preparing annual project and program plans. A system for preparing, vetting and selecting projects will need to be developed. The planning process is likely to maintain its present bottom-up character, although it would need to be complemented with appropriate top-down processes for setting operational program objectives and for evaluation of project proposals.

We suggest that ICARDA examine its current operational planning processes to introduce modifications as the center moves towards medium-term programming and project-based matrix management.

4.4.3. Monitoring and Review Processes. At present, operational planning through planning conferences is also the main process through which program implementation is monitored. During these conferences, brief reports on achieved results are presented by senior scientists. Later each research program prepares an annual report as a separate publication with contributions from various senior scientists which reviews and documents last year’s achievement and the general orientation of programs and projects. It is difficult to analyse these documents for assessment of progress made in individual projects including the evaluation of completed activities. Failures with lessons learnt from them are not reported. Finally, ICARDA’s annual reports summarize the major findings and achievements of the programs and of international cooperation.

ICARDA’s current internal monitoring and review processes are highly fragmented. What is needed is a system that would enable ICARDA to assess its overall institutional progress in implementing the strategy and the medium-term program, i.e., a more macro orientation to internal reviews.

Along with the assessment of institutional achievements, ICARDA needs to institute a project-level monitoring system. It would be desirable to have a system where performance assessments of individuals are tied closely to performance assessments of units (or projects). There would also be benefits in introducing a peer review mechanism.
The success of monitoring and review systems depends to a great extent on the quality of the information systems that generate the data used in evaluations. ICARDA should examine its current information systems to assess their suitability for its future monitoring and review needs.

In conclusion, we recommend that ICARDA critically assess the suitability of its current monitoring and review systems to its future needs, in the light of its strategic plan, medium-term program, and project-based matrix management system.
5. OPERATIONS MANAGEMENT

In the preceding chapter our focus was on organization and management of research at ICARDA. In this chapter we extend the discussion to non-research areas. In this instance we are using the term "operations" as a shorthand for many of the functions performed in support of research, training and information, i.e., such functions as finance, personnel, administrative services, Board services, donor and host-country relations, and computer services. As the substance of each of these functions is discussed elsewhere in our report, our emphasis here is on the overall organizational structure that links and integrates them.

A detailed organization chart for the entire center, as prepared by ICARDA, is shown in Appendix 3. In Figure 5.1, we illustrate the present reporting relationships among only the top managers, as we interpret them.

5.1. Criteria

In Chapter 4 we used five criteria for assessing the structure of research management: links with strategy, integration of activities, links with the environment, authority and responsibility of the scientist, and simplicity. All but one of these principles apply to operations management as well.

The links with strategy are important for two reasons. First, the organization's structure on the operations side depends to some extent on the administrative, financial and personnel implications of the changes in the strategy. Second, and equally important, the strategy of an organization usually helps clarify or introduce values and may indicate the need for culture change. Some of these effects may call for change in operational policies and structure.

Integration of activities is important not just within operations, but also between operations and research. Non-research linkages with particularly the host country and the donor community are also important. The simplicity criterion applies here as well.

Decentralization of authority down the line to the lowest level is not as strongly relevant in operations as in research. The rationale in research is to enable the scientist to innovate. In operations many of the tasks at the lowest level are straightforward and do not contain as high a degree of uncertainty as in research. Thus, the operator at the lowest level does not need to have as much autonomy.

To these criteria, we must add a final two: facilitation of management reforms and subordination of operations to research. On the first, our assessment shows that ICARDA's main weaknesses lie in the management area and a management reform is in order. The structure of the organization should enable ICARDA to initiate and carry out such reform in the most efficient manner.
Figure 5.1 Present Organization of Senior Staff at ICARDA

- Director General
  - Deputy Director General Research
    - Program Leaders
    - Director, Computer Services
  - Director of Administration
  - Financial Controller and Treasurer
  - Outreach Programs/Projects
    - Training
    - Seed Production
  - Deputy Director General International Cooperation
  - Assistant Director General
Regarding the second, the operations area should be clearly seen and accepted by everyone as subordinate to the organization's main business, that is, to research. This value is not shared as widely as it should be at ICARDA. The structure should reinforce it through appropriate allocation of authority and responsibility.

5.2 Need for a Second Deputy Director General

With the impending departure of the Deputy Director General (International Cooperation) and the suggested transfer of international cooperation responsibilities to a coordinator reporting to the Deputy Director General (Research), ICARDA's second tier of management will be considerably weakened. At the same time, the increase in the management burden of the Deputy Director General (Research) will limit his ability to fully backstop the Director General when the latter is away.

The obvious solution is to create a new Deputy Director General position. A center the size of ICARDA needs two Deputy Director Generals, particularly when both the Director General and the one deputy are relatively new at their posts.

We strongly recommend that ICARDA consider establishing a new Deputy Director General position in place of the Deputy Director General (International Cooperation) and designate it as "DDG-Operations" or "DDG-Management". (The former title was used previously in ILCA and the latter is now in use at IITA.) This would enable ICARDA to provide a central focus within the organization for currently needed management reforms and provide the necessary additional backstopping to the Director General. Once the necessary management reforms were completed, the organizational structure could again be reviewed and, if appropriate, revised.

The recommendation is not intended to take away from the Director General's leadership in all aspects of the center, including management reforms. What it provides is a person who would work under the overall guidance of the Director General in managing several functions and instituting the necessary reforms. We are afraid that if the Director General was to take this responsibility on to himself, it may weaken his ability to perform his representational and system-wide duties.

In the light of the criterion on the subordination of operations to research, we see the Deputy Director General (Research) as being next-in-line to the Director General. The Deputy Director General (Operations) would normally act for the Director General only in the absence of the other two. In reality, of course, the three would work closely as the top management team.

Our opinion is that the Deputy Director General (Operations) should be a senior individual, with considerable experience in CGIAR or similar research organizations. He or she should be service- and reform-minded, computer literate and have a good knowledge of finance and administration. His or her nationality should expand the present cultural mix at the senior management level.
Reporting to the Deputy Director General (Operations) would be three director-level positions: Director of Administration, Financial Controller and Director of Computer Services. ICARDA may also consider removing the personnel unit from administration and have its head report directly to the Deputy Director General (Operations), at least until the implementation of the human resource management reforms we recommend in Chapter 7.

We are somewhat concerned that our proposal would break the Financial Controller’s direct reporting relationship to the Director General. However, a similar arrangement exists at IITA and CIAT, and it seems to work well. It is necessary to re-emphasize that the Deputy Director General (Operations) should be experienced in finance. In fact, he could take over the duties of Treasurer from the Financial Controller.

We are equally concerned about the placement of the Director of Computer Services under the Deputy Director General (Operations). At the moment the status of the position is somewhat uncertain. In the organization chart prepared by ICARDA (Appendix 3) the position is shown as having a staff relationship to the Director General. Our observation is that it is a line reporting relationship (hence the difference between Appendix 3 and Figure 5.1).

The computer unit in a research organization is a support and service unit just like administration, personnel, finance, and research support services. In other CGIAR centers the service rarely reports directly to the Director General; the reporting is mostly to a Deputy Director General or the head of administration.

Computer Services collaborates with both research and administration/finance. This relationship would still continue under the new arrangement. A user committee would need to play a more important role. Also, the two Deputy Director Generals will be able to sort out any conflicting demands from research and administration/finance. Finally, moving ICARDA’s computer unit into the same complex as administration and finance may further improve its service philosophy.

It is argued by some that the ICARDA situation demands autonomy and high placement of Computer Services. This may have been true during the formative years of ICARDA, in order to build a computer unit within the organization and secure acceptance of its operations by Syrian agencies. The situation is now somewhat improved and there does not appear to be a compelling reason for according Computer Services an unusually privileged status.

5.3. Other Suggested Changes

We have three main proposals for change in the operations management area. First, we recommend that ICARDA establish an Assistant to the Director General position for providing secretariat services to the Board and for coordinating donor relations. The donor relations function is one that was ably performed by the retiring Deputy Director General (International Cooperation). The suggested transfer of his international
cooperation responsibilities to research leaves a vacuum in the donor relations area which can be filled effectively by the creation of this position. Several centers have used this arrangement successfully.

The other main responsibility of this position would be Board secretariat functions, supported by present staff as necessary. We believe this would take in the order of 25% of the incumbent's time. As work load permitted, he or she could also take on other special duties. The position should be filled through international recruitment.

Second, the Internal Auditor position we strongly recommend in Chapter 6 should report to the Director General as is the customary practice. This need not be an international position.

Third, ICARDA should continue to have a position devoted to liaison with the Syrian Government. Much of this liaison needs to take place in Damascus where there is already an ICARDA office. We suggest that ICARDA consider assigning the Damascus Office to the Assistant Director General for Government Liaison. He would need to spend a considerable portion of his time in Damascus. The role of the government liaison officer should be reassessed after the retirement of the present Assistant Director General.

5.4. Management Committees

An organizational structure reflecting our proposed changes in research and operations is shown in Figure 5.2. Although structural change alone is no panacea for organizational ills, we believe the structure we are proposing will better enable ICARDA to carry out its strategy and undertake the necessary management reforms than would the current structure. Results will naturally depend on leadership, commitment, persistence, qualified individuals, good will and a little bit of luck.

ICARDA should consider establishing several management committees to facilitate coordination, communication and timely decision-making. These are in addition to the Senior Staff Committee established by the new Director General, a move which we strongly support because of its potential contribution to improving communication. We have four management groups to propose (the names and frequencies are for illustrative purposes only):

- **Executive Group:** Made up of the Director General, two Deputy Director Generals the Assistant to the Director General; meeting at least once weekly.

- **Research Group:** Made up of the senior managers under the Deputy Director General (Research) and the Director of Computer Services and chaired by the Deputy Director General (Research); meeting at least once per month.
Figure 5.2 Suggested Organization of Senior Management at ICARDA

- Director General
  - Assistant to the Director General
  - Assistant Director General (Government Liaison)
  - Internal Auditor
  - Deputy Director General (Research)
    - Research Program Leaders
    - Coordinator International
  - Deputy Director General (Operations and Treasurer)
    - Director, Computer Services
    - Director of Administration
    - Financial Controller
- Operations Group: Made up of the senior managers under the Deputy Director General (Operations) and chaired by the Deputy Director General (Operations); meeting at least once every two weeks.

- Senior Management Group: Made up of the participants to the above three committees and chaired by the Director General; meeting at least once every three months.

His lengthy absences from Aleppo would not allow the Assistant Director General for Government Liaison to participate in all the meetings of the Executive and Operations Groups where his participation would be desirable.

Finally, we would propose that meetings of these groups take place regularly and in an orderly fashion, with agendas distributed beforehand and minutes prepared afterwards. This would facilitate decision-making and add much to the institutional memory of ICARDA.
6. FINANCIAL MANAGEMENT

The Financial Controller and Treasurer is the chief financial officer of ICARDA. He heads the Finance Department and enjoys considerable autonomy in making decisions on all financial matters. He works closely with and reports directly to the Director General. The position has been occupied on an acting basis for almost 24 months during the last three years.

ICARDA's overall financial performance over the last five years has been relatively good, thanks in major part to sizeable exchange gains in 1986 and 1987. But this record masks the considerable weakness of the financial management function over the last few years. The departure of the previous incumbent in the middle of 1987 greatly aggravated the situation. For this reason a considerable portion of our report is devoted to review of the macro aspects of financial planning and management, with particular emphasis on assessment of ICARDA's overall financial performance and aspects of financial planning, budgeting, accountability and control. Our aim is to make suggestions for improvements in a situation which has shown a considerable and material deterioration over recent years.

The finance function in a research center exists in order to facilitate the work of those who carry out research and related activities. This must be accomplished within the confines of financial discipline and guided by accurate and timely reporting of data for control and decision-making. The evidence we saw suggests that financial management at ICARDA was heavily dependent on the person of the now-departed Financial Controller. Internal organizational control mechanisms were not given a chance to grow so that they could function independently. Accordingly, his departure created an important vacuum and weakened, to an alarming degree, the management-control environment.

6.1. Overall Financial Performance of ICARDA

Over the last five years ICARDA's revenues and expenditures have grown considerably, though with little change in the number of core donors. In 1983, 24 donors provided ICARDA's core funding (including restricted core), 53% of which came from two donors (USAID and, as donor of last resort, the World Bank); in 1987 core funding was provided by 23 donors and 49% of these funds came from the same two major donors.

6.1.1. Financial Growth. ICARDA's total income has grown from U.S. $20.9 million in 1983 to U.S.$27.2 million in 1987, an average growth of 7.5% per year (Table 6.1). Total expenditures increased for the same period from $20.2 to $27.1 million, an average growth of 8.5% per year. In real terms, however, income and expenditure growth have been of the order of 1.7% and 2.5% per year, respectively, over the period 1983-87.
Table 6.1  
Income & Expenditures of ICARDA (U.S. $ Million)  
(Percentage shows growth over previous year)

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<tr>
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<td>3</td>
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* Including "Other" source category of Table 6.2.

The major part of the growth in ICARDA’s total income is attributable to the growth in contribution from other sources from $0.3 million in 1983 to $5.2 million in 1987 (Table 6.2). The increase in core sources for this period was only 1.6%. However, there has been a gradual increase in ICARDA’s income from special projects. In 1983, 91% of ICARDA’s total income derived from core sources; this dropped to 71% in 1987 (Table 6.2).

ICARDA’s financial growth over the last five years compares favorably with that of other CGIAR centers.
Table 6.2  
Sources and Application of ICARDA's Funds  
(U.S. $ Million)

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</tr>
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<td>Special Projects</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>2.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Total Applications</td>
<td>20.2</td>
<td>20.9</td>
<td>21.3</td>
<td>21.6</td>
<td>27.1</td>
</tr>
</tbody>
</table>

| Unexpended balance   | 0.7   | 2.5   | 0.7   | 4.3   | 0.1   |

* Including exchange gains.

6.1.2. Shifts in Resource Allocation. The increase in ICARDA's income in recent years has been accompanied by two major trends in the allocation of these resources. First, the share of general administration and general operation expenditures has dropped from 37% of the total recurrent core expenditures in 1983 to 28% in 1987. By contrast, the resources allocated to research, training and information have increased from 63% to 72% over the same period (Table 6.3). Both of these are positive developments for which the center should be commended. Second, within research, the funds allocated to the center's own direct research activities have increased from 40% of all core operating expenditures in 1983 to 45% in 1987.
Table 6.3

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<tbody>
<tr>
<td>Research</td>
<td>40</td>
<td>41</td>
<td>44</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>Cooperative Programs</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Research Support</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Sub-total</td>
<td>56</td>
<td>58</td>
<td>63</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Training</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Information</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>General Administration</td>
<td>19</td>
<td>18</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>General Operations</td>
<td>18</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</table>

6.1.3. Use of Funds. Analysis of ICARDA's use of its total core funds during the last five years shows (a) the substantial share - an average of 21% over the five years 1983-87 - of funds devoted to capital expenditure (Table 6.4), and (b) the high employment cost - an average of 68% of recurrent core on permanent, casual and consultant employment over the five years 1983-87 - ICARDA is experiencing (Table 6.5), both of which are above the average of other CGIAR centers.
Table 6.4

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<tbody>
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<td>Research</td>
<td>29</td>
<td>31</td>
<td>36</td>
<td>38</td>
<td>35</td>
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<tr>
<td>Cooperative Programs</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Research Support</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Sub-total</td>
<td>40</td>
<td>44</td>
<td>51</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>Training</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Information</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>General Administration</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>General Operation</td>
<td>13</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Capital</td>
<td>27</td>
<td>24</td>
<td>19</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>TOTAL USES</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</table>
Table 6.5 Percentage Use of ICARDA's Core Funds - Operations by Categories of Expenditure

<table>
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</thead>
<tbody>
<tr>
<td><strong>Employment Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>P Level</td>
<td>20</td>
<td>19</td>
<td>22</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Q Level</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>S &amp; T Levels</td>
<td>26</td>
<td>28</td>
<td>28</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>56</td>
<td>58</td>
<td>60</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td><strong>Operations Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultants</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Casual Labor</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>4</td>
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<tr>
<td>Board of Trustees</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Travel</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>7</td>
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<tr>
<td>Other</td>
<td>24</td>
<td>23</td>
<td>23</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

6.1.4. Liquidity Position. Liquidity ratios are indicators of an organization's ability to meet its obligations due for repayment over the short term. They are important for judging an organization's financial viability. The liquidity of ICARDA (Table 6.6), judging from the current ratio (current assets/current liabilities), shows an improving trend and a notably healthy position. The quick ratio (current assets excluding inventories/current liabilities) is, however, a more significant liquidity indicator. This indicator also shows a healthy position and improving trend over the last five years.

Table 6.6 ICARDA's Liquidity Position

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<tbody>
<tr>
<td>Current Ratio</td>
<td>1.7</td>
<td>2.0</td>
<td>1.9</td>
<td>2.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>1.6</td>
<td>1.9</td>
<td>1.8</td>
<td>2.2</td>
<td>2.4</td>
</tr>
</tbody>
</table>
It should be noted, however, that these ratios are based on the year-end position, when most funds are in hand. The fact that ICARDA has not had to resort to borrowing also indicates its satisfactory liquidity position over the last five years. However, there is no reason for complacency, as the current healthy liquidity position could easily deteriorate in a few years unless prudent measures are taken to safeguard it.

6.1.5. Changes in ICARDA's Funding Base. ICARDA receives its contributions from donors as unrestricted core, restricted core or special project grants. As indicated earlier, ICARDA's revenues in aggregate have grown over time. This has been achieved, in part, by adding new donors (the number of donors increased from 29 in 1983 to 40 in 1987), and partly through enhanced contributions from existing donors. While these are notable achievements, the fact remains that the major share of the contributions to ICARDA continues to be made by USAID and the World Bank, the latter as donor of last resort (Table 6.7). Reliance on these two donors for nearly half of the center's total funding may be risky and could lead to greater future uncertainty than if donor contributions were more evenly distributed.

Table 6.7 Percentage Distribution of Donor Contributions to ICARDA's Funding

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<tbody>
<tr>
<td>Core</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>World Bank</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Sub-total</td>
<td>48</td>
<td>50</td>
<td>52</td>
<td>48</td>
<td>42</td>
</tr>
<tr>
<td>Other Donors</td>
<td>44</td>
<td>43</td>
<td>38</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>Special Projects</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

In our view ICARDA's potential for both increasing its funding and reducing its dependence on the two major donors is higher now than in earlier years. This is in large part because of the strides made by ICARDA in developing an effective research program which should "sell itself". Nevertheless, we suggest that ICARDA management, with the
assistance of the Board, develop and implement a fund-raising strategy aimed at expanding its funding base.

We reviewed the emphasis given to the raising of special project funds compared with funds for unrestricted core projects. Unrestricted core funds provide more flexibility in expending such resources than do special project funds which are intended to be used for specific project activities. We noted no special bias in favor of raising special project funds which have increased from 8% in 1983 to 12% in 1987 (Table 6.7). However, the Board and management should carefully watch the level and composition of special project funding on an ongoing basis so as to ensure that ICARDA's essential activities are given proper emphasis. Also, ICARDA should not undertake the management of small special projects.

6.1.6. Importation of Syrian Currency. Since July 1985 ICARDA has been importing Syrian Pounds (SL), purchased on the free market in Lebanon at significantly more favorable rates than officially available in Syria, to pay the monthly payroll of its local staff. This is a perfectly legitimate business practice, as there are no legal restrictions to importing local currency into Syria, in any amount. (Exporting Syrian currency, though, is strictly forbidden.) The currency exchanged was charged to ICARDA's expenses at the budgeted rate of SL 10 per U.S.$, the rate used for converting the dollar salary base of local staff to Syrian pounds, irrespective of the actual U.S.$ cost. This resulted in substantial savings in 1986 and 1987, which are reflected in the figures for "other sources" of funds in Table 6.2.

Although there is no evidence of anyone benefiting personally from this operation, it was poorly handled by ICARDA as a financial practice (e.g., incomplete documentation, insufficient internal control, suppressing the disclosure of the gains in financial statements through improper accounting treatment, non-reporting of the matter by external auditors in their reports on the 1985 and 1986 accounts, etc.) In addition, the local staff (supported by some members of the Board) began to make claims on a portion of the exchange gains, arguing that they had a right to do so because the gains resulted from exchange of foreign currency "earmarked" for payment of their salaries.

Early this year, ICARDA's Board decided to halt this so-called "Lebanese Window" operation, effective end of 1988, in order to "regularize" ICARDA's exchange policies. We fully sympathize with the action taken by the Board. Had it not been for the confounding factors, it would not have made business sense to discontinue the operation. (The opportunity cost to the CGIAR of ICARDA's closing of the "Lebanese Window" has been estimated at over U.S.$5 million for 1989.) Taking this action, however, enables ICARDA's Board and management to make a clean break with the past. We suggest that the Board periodically review its exchange policies as circumstances change.

As noted earlier, the Financial Controller and Treasurer is the chief financial officer of ICARDA and reports directly to the Director General. The position was vacant from August 1987 until June 1988. Reporting to the chief financial officer are seven finance officers for financial reporting, costing, financial operations, pre-audit and control, cash management, outreach, and budget (the latter position is vacant). These officers are supported by 13 accountants and assistants (three of these positions are vacant), and two secretaries.

While the present structure and staffing should normally be adequate to carry out ICARDA's financial activities in an efficient manner, this is not the case. The main reasons are briefly discussed below.

6.2.1. Financial Control. The financial control function in ICARDA was heavily dependent on the person of the previous controller. His departure in August 1987 created a significant vacuum and weakened the management control environment to an alarming degree.

6.2.2. Staffing. From mid-1987 until June 1988 the finance officer for financial operations was acting as Financial Controller and Treasurer in addition to carrying his normal duties. He was overburdened and not able to delegate some of his responsibilities to other officers, in part due to shortage of accounting staff (the three vacant positions) and in part due to the inexperience of many of the support staff.

The situation has been exacerbated by lack of cooperation among the finance staff. Good discipline is essential in carrying out financial management functions. Absence of permanent and strong leadership also aggravated the situation.

6.2.3. Accounting and Reporting. Accounting functions and related vital reconciliations are far behind. In consequence, the monthly financial reports do not reflect the up-to-date status of expenditures, and are also released to users very late. This makes the control function unproductive. (At the time of the panel's review not a single financial report had been released for the first five months of the current year.)

6.2.4. Cost Accounting. In compliance with the recommendation of the 1984 EMR, a qualified cost accountant was appointed in October 1986 to design and introduce an appropriate cost accounting system to complement the center's Management Accounting System.

Considerable effort was spent by the cost accountant to produce the proposed cost accounting and chargeback system. The system was introduced to program leaders and other key users in a seminar in September 1987, and initiated much discussion and awareness of the benefits of cost accounting. The proposed cost accounting system, however, has not yet progressed to the testing and implementation phase.
Introduction of cost accounting in ICARDA would facilitate financial management in two important areas. First, it would be possible to cost activities accurately. This would improve budgeting and control. It would be possible, for example, to estimate costs of projects more accurately if ICARDA were to move towards project-based management. Second, ICARDA would be able to introduce and implement a reliable charge-back system if there were a cost accounting system providing the necessary detailed data.

Despite these advantages, introduction of cost accounting does not appear to us to be a high priority need in the near future. Unlike the period of the 1984 EMR, financial management at ICARDA in 1988 has a number of weaknesses (as summarized in this chapter) which deserve higher attention than introduction of cost accounting. Moreover, there is need to exercise caution so as to ensure that excessive bureaucracy is not created for the sake of having a cost accounting system. We recommend that ICARDA proceed cautiously in the implementation of a cost accounting system so as not to delay the introduction of higher priority reforms in financial management.

6.3. Financial Planning and Budgeting

6.3.1. The Current Planning and Budgeting Process. During the early years of ICARDA the budget was formulated in a "zero-base" manner, i.e., all expenditures in programs and activities had to be justified. In recent years ICARDA's management began allocating funds to departments and programs for the coming year during the last quarter of the year, based on the CGIAR Secretariat's indications of funding prospects. Salaries are centrally budgeted by the Finance Department, based on information from departments and programs of their staffing needs. Non-salary items are also allocated centrally, on an incremental basis, based on each department's or program's actual expenditure the previous year.

Subject to guidelines from ICARDA's management, individual cost centers (budget centers) have autonomy in managing their non-salary budgets. The Finance Department issues monthly reports, though in recent times very tardily, to the budget centers on actual expenditures against budgeted figures.

The financial information in the present format of the operational statements is not presented in a way to enable management to exercise adequate control. The present statements show current month and year-to-date expenditure which is projected forward on a straight-line basis and compared with the annual budget. This implies that no budgetary control is in existence since any over/underspending occurring at the beginning of the year is being assumed to continue throughout the rest of the year. The lack of monthly phased budgets makes it very difficult to exercise meaningful budgetary control, especially over seasonally fluctuating expenditures.

The present statements of operation are produced at the program level, the department level and for ICARDA as a whole, but not for the directorate level. Preparing the statements in a different form requires and we recommend that the Computer Services unit introduce the long-awaited
enhancement to ICARDA's Management Accounting System. The amendments should include but not be limited to providing:

- the possibility for various types of reporting through free format;
- various editing functions, e.g., check digit for the coding to prevent wrong posting, voucher sequence control to prevent omission in data entry and posting to financial records, etc.
- the availability of ports to various departments and programs to enable direct retrieval of their financial data through the network;
- the inclusion of the receivables and commitments of each program/department as committed funds in their monthly statement of operation against the same budget line where advance payments or commitments were made (e.g., travel advances, advances to supplies, purchase orders issued, etc.) which would allow better budgetary control and effective utilization of the real free balances;
- statements of operation which reflect more detailed expense categories at the project and program levels, with various degrees of summarization for the different management levels of ICARDA.

6.3.2. Financial Planning and Review. Financial implications of ICARDA's program plans need to be considered in a more systematic and analytic manner than at present. To be fully effective, this will require an improved framework of qualitative and quantitative performance indicators for assessing strategies, programs and projects.

There is also a need for program review and development on an on-going basis. One way to ensure this is to have all research conducted on the basis of fixed-life (say one- to three-year) projects with specific output objectives and accountability. Such projects would also constitute the basic building blocks from which the program and thence the overall research budget would be built in bottom-up fashion. This would both provide a mechanism for staff within programs to have a better say in budget development and, in contrast to the current situation where program leaders have total control of their program's budget, give program scientists prespecified rights to budget expenditure via project budget entitlements. It would also ensure on-going review of the center's portfolio of research projects in terms of priorities relative to institutional objectives and resource availability, as well as providing a formalized mechanism for cooperation across programs relative to specific project needs. As recommended in Chapter 4, we believe ICARDA should institute a project-based planning and budgeting system.

Project budgeting within programs will require accurate and reliable accounting and budgeting systems. Allocation of salaries and other expenditures by project would involve reasonable estimates of time spent on different projects. Also, non-salary items will need to be allocated to projects through a cost accounting system or its equivalent. Thus,
introduction of project budgeting will place added demands on ICARDA's scientists and the Computer Department.

6.4. Financial Accountability

6.4.1. Financial Reporting at Headquarters. In their management letter on the 1987 accounts, the external auditors have indicated significant weaknesses in many areas ranging from weak controls, sloppy checking, important unattended reconciliations, delays in clearing suppliers' advances, long outstanding staff advances, etc. This state of affairs is not conducive to reinforcing financial accountability. A financial reporting system is necessary for monitoring performance and taking timely corrective action.

6.4.2. Financial Accountability of Outreach Programs. Other than the Nile Valley project, the Baluchistan MART/AZRI project and the Beirut office which keep a full set of financial records, all other outreach programs send their monthly details of expenses and supporting documents to ICARDA's headquarters for processing and recording. All of them are operating through advance payments by headquarters on a postulated need basis rather than on the basis of reimbursement of actual expenditures. The panel suggests that outreach programs, including the Beirut office, operate on a revolving imprest account based on a pre-determined initial advance, to be replenished on the basis of actual approved expenditures and upon submission of adequate disbursement vouchers.

6.4.3. Internal Control System. We discussed ICARDA's accounting and other internal control systems with the current external auditors. We were also provided with a copy of the final draft of the management letter prepared by the auditors on their audit of the 1987 accounts.

ICARDA does not have clear policy on control via segregation of duties. For example, stock control is currently the responsibility only of the administration's Purchasing and Supplies Department (PSD) which carries out all the functions of ordering, receiving, pricing, storing, issuing and maintaining store ledgers. We agree with the current practice of keeping PSD within the Administration Department but we suggest that the store ledgers be maintained in the Finance Department so that stocks can be controlled through a segregation of duties. These ledgers, of course, must be accessible to the Purchasing and Supplies Department.

6.4.4. Registration of Fixed Assets. Shortage of staff, it seems, has as yet prevented full implementation of the center's computer-based registration system for fixed assets; likewise the physical verification of items received since mid-1986 and the tagging of items received since March 1987 has not been carried out, nor have items received in 1988 been entered in the register. We recommend that the fixed asset registration system be fully implemented as soon as possible; that responsibility for its implementation be with the Purchasing and Supplies Department; and that the finance department not finalize payment unless the relevant documentation received from the Purchasing and Supplies Department includes the tag number.
6.4.5. **Cash and Investment Management.** ICARDA maintains 22 bank accounts in various currencies. The major share of funds is maintained in current accounts in London for three major currencies (U.S.$, pound sterling and D.M.). Surplus funds are transferred from the current to deposit accounts. ICARDA has no Board-approved statement of its investment policy. The investment policy followed, however, has been a conservative one.

Funds surplus to immediate requirements are deposited for one to three months' time deposits, mainly with ICARDA's main bank in London (HSBC). Such funds have increased over recent years reflecting improved resources available for working capital, the capital fund and the capital development fund. Cash balances (including staff benefit commitments) amounted to U.S.$9.6 million on December 31, 1983 and $17.3 million at the end of 1987.

We recommend that ICARDA's Board specify the investment policy that ICARDA management should follow. This should include a requirement for regular reporting to the Board of the investments made and their results. Without such a Board-approved policy, the Board cannot claim that it is meeting its fiduciary responsibility. Also, management should reassess its current investment strategies to consider a broader range of safe investment instruments and maturities. Proposals to this effect should be submitted for the Board's review and approval in the light of the approved investment policy.

6.5. **Auditing**

6.5.1. **External Auditing.** The firm which conducted the 1987 audit was Arthur Andersen & Co. For this audit, the firm did not receive an engagement letter from ICARDA, nor did the firm submit a confirmation letter to ICARDA, nor was the firm formally appointed by ICARDA's Board. The panel considers this a very peculiar situation, especially with such an international firm, and a clear reflection of the inexperience of the ICARDA Board in management and finance matters.

The panel held a meeting with the partners and audit manager in charge of the external audit of ICARDA. The financial statements for the year ended December 31, 1987, together with the auditors' report, were provided to us as a "draft for discussion only", and the discussion on financial operations was based on the external auditors' interim audit. The discussion indicated that ICARDA's accounting controls are generally inadequate, professional expertise of some finance staff, is below what would be desirable, both quality and quantity of the accounting work are weak, and many important reconciliations are still to be done.

We were informed that the management letter encompassing these and other internal control matters is being finalized for transmittal to the Director General and the Board member delegated to liaise with the auditors.

6.5.2. **Internal Audit.** Internal auditing is of crucial importance for ensuring the integrity of operations in an organization. It is a necessary
managerial control activity which assesses the effectiveness of other controls. The responsibilities of internal auditing need to be clearly spelled out in management policy statements if the audit function is to carry out its mandate effectively. Independence is a key factor to an internal auditor's effectiveness and is normally provided by direct reporting to the chief executive officer and the support accorded by management.

ICARDA's external auditors, during the panel's discussion with them, agreed to the strong need and importance of internal auditing, both financial and operational. Though without according it high priority, the 1984 EMR also saw the need for the appointment of an internal auditor reporting directly to the director general and responsible for checking that the financial accounting and administrative procedures established in the center are properly carried out. As yet ICARDA has no internal auditor in place, nor has any serious attempt been made to appoint one. We **strongly recommend** that a qualified internal auditor with responsibility for both financial and operational auditing be appointed without delay. This would not be a P-level position.

6.5.3. Audit Committee of the Board. At its April 1987 meeting, ICARDA's Board delegated one of its members to liaise regularly with the external auditors. At its April 1988 meeting, the Board's Executive Committee "agreed in principle to the appointment of an Audit Committee." Not least because of the current control difficulties but also because of ICARDA's size, such a committee must be appointed and carry out the normal functions of a Board audit committee. We **strongly recommend** that the Board establish an Audit Committee without delay.
Managing people is perhaps the most important responsibility of the line managers in an organization. Each manager acts almost like the conductor of an orchestra -- leading and directing the activities of his staff in such a way that the combined effort produces desired results. The manager does this by setting and clarifying goals, planning the unit's activities, selecting staff, securing the necessary resources, solving problems, facilitating the work of others, motivating and developing the capabilities of subordinates, listening and providing feedback, and assessing and reinforcing the performance of individuals. Doing all of these requires good skills, particularly in getting things done effectively through other people.

The personnel office is important in human resource management because it plays an instrumental role in setting the policies, procedures and standards that guide the management of people by line managers throughout the organization. A weak personnel office coupled with unit managers unskilled in the art of managing people is tantamount to "blind leading the blind" in the management of human resources. The situation at ICARDA is not exactly this, because there are some good unit managers, but it is not too far from it.

7.1. Basic Facts

Of the $19.7 million budgeted in 1987 for ICARDA's core activities, $13.8 million or 70.4% was proposed for personnel expenditures. In the event, $66.1 million was expended on personnel (Table 6.5). As of April 30, 1988 the center had 740 employees at all of its locations. They came from 35 countries spanning five continents. Over 88% were based at headquarters at Aleppo/Tel Hadya. Just under 20% were women.

ICARDA has two categories of staff, international and regional. The former are internationally recruited and called "P". The regional staff consists of three groups: (i) "Q" staff, who are designated "professional and supervisory staff" and are divided into Q1 and Q2 (with the latter, in terms of duties, being virtually P-level staff under another name); (ii) "S" staff, with three "grades" and designated "senior technical, scientific and administrative support staff"; and (iii) "T" staff, with four grades, called "technical, scientific and administrative support staff". The regional staff has been locally, regionally, and internationally recruited, with Syrian nationals comprising the bulk of the S and T staff.

ICARDA employees regard S and T staffs as a unit, since together they constitute the junior employees of the center. The Q staff receive some emoluments approaching those of the P staff, particularly with respect to housing, education and transport.

The number of employees in each category and their source of funding as of May 1988 are shown in Table 1.1.
7.2. Policy Background

Modern approaches to human resource management are active, assertive, forward looking and fair. Assumptions underlying these approaches are (1) the human resource is usually the most expensive and important one in an organization, (2) the resource is not static and will erode over time if it is left alone, and (3) to be a good manager of the resource means taking steps to increase its worth. Operationally, the last point involves sponsoring programs and following practices that lead to the acquisition of good people, that improve people once they are in the organization, and that create settings to optimize employee effectiveness.

Effective human resource development calls for good recruitment, objective assessment of candidates, fair selection methods, operative performance-evaluation plans, feedback mechanisms to reinforce or change performance, effective goal-setting and planning and follow through on the plans, employee development programs including career-counseling, training and other educational arrangements, planning and preparation for employee career movements in the organization and out of it, job classification and valuation schemes based on job descriptions, reward systems tied to performance, sincere attention to gender issues and grievance procedures, and objective means of supporting termination decisions. Some good human resource management offices help work units develop teams, resolve conflicts, plan and set goals, and deal with employee stress and other personal issues that affect work. Many good units help create organizational settings that guarantee a high quality of work life. We did not find such a forward-looking approach to human resource management at ICARDA.

To be effective in managing the center's human resource, management must decide on desired states for the human resource, and plan to attain those states. The plan should be based on assessments of the current state of the resource and on the qualities the resource should have at some future time to achieve ICARDA's overall objectives. The required human resource management plan would itself describe how ICARDA intends to reach the desired states for its people.

We have heard that the proposed new personnel policies will solve many problems at ICARDA, and there is no question that policies are needed. It should not be assumed, however, that new policies alone will energize a progressive human resource management effort. The mandate has to come from management decisions based on a plan. The plan must prescribe action steps to ensure good management of the human resource, including measures for improving the management skills of unit managers. Causes not symptoms of malaise in the personnel area must be attacked.

7.3. Personnel Policies

Two sets of personnel policies are in effect at ICARDA: (i) one for international staff dated October 1, 1984; and (ii) one for regional staff, in effect since January 1, 1983. A new personnel policies manual for all staff was submitted to the Board of Trustees, approved and then rescinded by
the Board in 1987. A revised version based on earlier ICARDA drafts and a recently promulgated ILCA manual is to go to the Executive Committee of the Board in June 1988.

A key provision of the new manual, reflecting a decision of the Board, eliminates discretion in the Director General/Director of Administration to permit accumulated leave to be extended beyond the entitlement due for two years of employment. Formerly the Director General and Director of Administration had discretion to waive this limitation, a power which was exercised, at least by the former Director General. Granting exceptions to the published policies contributed to lessened staff respect for the center's policies. The manual about to be submitted to the Board still preserves the authority of the Director General to grant exceptions in emergency cases. This is understandable and desirable. The important point is that exceptions be considered only in well-justified cases. If a significant problem exists with the policies, the relevant provision should be changed, not an exception granted.

The Board has been active in the development and setting of major personnel policies. Certainly these policies are of sufficient importance for the Board to review and approve them. However, they should be developed by management and the Board members should never be put in a position of negotiating with employees (as has occurred on occasion). The Board must be systematically informed on personnel matters and it is the responsibility of management to ensure this. Accordingly, we recommend that the Board abstain from direct involvement in the detailed formulation of personnel policies. Concomitantly, the Board should require the Director General to keep it regularly and meaningfully informed on personnel matters.

7.4. Job Categories

The revised manual establishes a new nomenclature for job categories: (i) the P designator is continued for international staff but the P category is now described as "Principal Scientific and Managerial", with seven grades; (ii) Q becomes RA (Research and Administration) with two grades; and S and T are now retitled GS (General Service) with eight grades. The "Regional" category disappears as such but the basic structure remains the same. The dropping of this term may reflect the reality that (i) the present Q staff is frequently recruited internationally, not just within the ICARDA "region"; and (ii) the S and T staff is basically Syrian and in fact is a "national" staff.

The new categories stop just short of dividing the staff into international and national, perhaps because ICARDA does not have the number of international positions necessary to include all Q2 staff who, in many cases, are almost indistinguishable from P staff in terms of what they do. If ICARDA believes that international competition is necessary to recruit the best staff, it could (i) determine in advance the positions needed to be filled by international competition, regardless of whether recruitment is to be at the present P or Q level, and (ii) consider designating the present Q2 staff as junior P staff. If this were done, there would be just two categories, international and national.
Within the center's job categories are a number of grades (expanded under the latest version of the personnel policies manual). There are, however, no steps or salary increments within those grades as typically used by other organizations for fixing merit pay as a part of the annual performance appraisal activity. The panel suggests that ICARDA establish steps within each grade of regional staff, integrated with a job classification and appraisal system.

ICARDA also employs teachers at the international school, outposted staff and local hires in the countries concerned, and casual farm labor. Most of these groups have different terms of contract. The position of teachers is discussed later in this chapter.

7.5. Pay Principles 1/

ICARDA's policy is to pay all P-level staff in U.S. dollars. In 1988 they received a "bonus" which was not an increment to their basic salary. We recommend that ICARDA establish an orderly and systematic policy for granting increments to P-level staff for both cost of living increases and merit. In the implementation of this policy the Board should concern itself with the general level and percentage range of increases, not individual cases.

1/ In response to a request from the Chairperson of the ICARDA Board on January 20 1988, the Chairperson of the EMR panel listed the following as key principles that should apply to issues concerning compensation of locally recruited staff:

1. An international center should do its utmost to honor its contractual obligations to all staff. If a center is unable to fulfill its commitments to staff for financial reasons, it should find ways of reducing expenditures (which may involve laying off some staff) or raising its revenues.

2. As a general rule, all locally-recruited staff (that is, staff not recruited through international competition), whatever their nationality, should be paid in local currency. Salary and benefits for such staff should be competitive with prevailing compensation packages in local or international organizations employing similar staff. This is the prevailing practice in the CGIAR centers.

3. Salary levels of staff, regardless of nationality and currency denominations used, should be treated completely independently of the sources of funds used to meet the salaries.

4. In general, within the authority given to it by its charter, a Board has the authority to set new center policy on salaries and other matters at any time.
In 1985 ICARDA decided that (i) all new Syrian employees would be paid in Syrian pounds; and (ii) existing Syrian employees with dollar-denominated contracts would continue to have their salaries and benefits denominated in dollars, but that salary would be paid in Syrian pounds converted at the official rate of exchange. At the beginning of 1988 this was SL 11.2 per U.S.$. Since 1985 two developments have taken place. First, Syria has experienced double-digit inflation. Second, Syrian pounds can be purchased in Lebanon at a substantial discount from the official rate. ICARDA took advantage of the latter situation to acquire the Syrian pounds required to pay Syrian national employees. This operation has been described in Chapter 6.

This practice led to a widespread belief among employees that they were being unfairly deprived of what they were entitled to under their dollar-denominated contracts and that ICARDA was making money out of them. As stated in Chapter 6, this year the Board decided to close the "Lebanese Window" as of December 31, 1988. After that date all of ICARDA's local currency requirements will be met by conversion of dollars or other hard currencies into Syrian pounds at the official rate.

Over the last nine months the management and Board have also grappled with the twin problems of (a) breaking the link between dollar-denominated employment contracts and the Syrian pound, and (b) responding to the rapid inflation being experienced in Syria as it affects Syrian pound-paid employees. In November 1987, for staff paid in Syrian pounds, the Board approved and on January 22 of this year ratified a proposal to grant a 30 to 70% cost-of-living adjustment applicable only to 1988.

At its November 1987 meeting the Board decided, in effect, that the link between the dollar and the Syrian pound in employment contracts would end. It is not clear from various Board minutes whether it was realized employment contracts would have to be cancelled and termination benefits, denominated in dollars, would have to be paid. In any case, as a result of management discussion, regional staff consultation, and the involvement of several Board members, a proposal emerged to: (i) cancel all of these contracts and offer new ones denominated solely in Syrian pounds; (ii) pay in dollars the termination benefits accrued as of the date of cancellation, including accumulated leave; and (iii) incorporate the 1988 cost-of-living adjustment into new salary scales to be paid under the contracts. Implicit was the assumption that new contracts would be offered to all employees concerned.

We understand there was consultation by telex with the Board before the proposal was put in effect on May 31, 1988. In our view, this was a major change in employment policy and should have followed a more systematic course, particularly with regard to (i) the decision to incorporate the 1988 cost-of-living adjustment into the new salary scales in the absence of comprehensive salary and cost of living surveys (which were not done); and (ii) the question of automatic re-employment of staff without considering whether all should be re-employed and if so on what terms.
7.6. Regular Pay

The pay scales for ICARDA staff are complicated by the different categories of employees who have either been recruited internationally or hired locally; who are Syrian, foreign, or both kinds of citizens; and who have contracts with different specific terms in them. Other confounding factors are the several levels of foreign exchange rates, including that in Lebanon, for Syrian money; the changing value of the U.S. dollar; and inflation in the Syrian economy. That ICARDA is seen as an "American organization" further confuses matters. The sum is that it has been difficult to establish a pay plan that appears fair to everyone.

In organizations without the confounding features of ICARDA's situation, the usual way of valuing jobs is against a set of factors internal and external to the organization. Internal factors usually include responsibility level, skill and education required for the job, stress and hazards associated with the work, and other items of value to the organization. Length of service can enter the formula separately or can be included in some of the other factors. There are complex, but useful, job valuation methods available for scoring jobs for this purpose. External valuation of a job is usually determined by scarcity in a market. A measure of the external, and to some degree the internal, factors is the comparable value of similar jobs in a reference market. Such markets are usually the local or regional labor markets, but they can also be, as for some staff in ICARDA's case, other international centers or programs.

Comparative internal job-evaluation methods or external surveys have not been extensively used by ICARDA to determine salary levels. Both approaches can be costly, and although objective, they are not considered completely fair by ICARDA's Regional Staff Committee. The committee's point is that salaries constitute income at ICARDA, but that is not entirely true for other similar jobs in the region. Committee members said persons outside of ICARDA are often able to have other sources of income because the work-hour expectations elsewhere are not as high as at ICARDA.

Given these conditions, how should ICARDA best determine salary levels? The Board should decide to what extent it wishes ICARDA to be "the best employer in the region". That done, we recommend the use of reliable salary surveys of positions similar to those at the center in local, regional, and international markets, where appropriate, but taking account of actual income obtained by those surveyed for the actual effort they put in. ICARDA should, we believe, continue to try to stay at the high end of the comparable incomes, but not so high as to appear irresponsible.

The suggestion above does not account for discrepancies that exist in pay to different people at ICARDA who hold a similar job. Most of these discrepancies exist because of different contract conditions under which the people were hired or because they are Syrian rather than non-Syrian. We believe it is essential for ICARDA to maintain its international character. To do this may require that for some scarce skills Q- (or new RA-) level staff should be internationally recruited. In cases of scarce skill, these internationally recruited staff should be paid in U.S. dollars.
This will be at the cost of some inequities in pay for people in somewhat similar positions. For the historical anomalies of differing contract conditions, we expect that future hires will follow a standard policy and there will be fewer exceptional situations. We do not recommend retroactively correcting the differences that currently exist.

7.7. Personnel Management

The personnel office has not been a strong force. It has mainly served a low-level record-keeping function rather than a policy and developmental role. There are currently no professionally trained human resource management staff in the office. The present staff appears to work diligently.

The Personnel Officer received commendations as a caring, sincere, hard-working person, but her position and power have been diluted by the management styles of some of the top management at the center, best characterized by what might be called "ad hocism". In this environment even a Personnel Manager who has operated at a more senior level might well be frustrated. There is an urgent need for a strategy for the development and implementation of a human resource management program. The center should shift to a more active, forward looking and professional human resource management effort. Crucial to this, we strongly recommend the appointment of an internationally recruited human resources manager to head the personnel unit.

7.8. Recruitment, Selection and Placement of Personnel

We received a number of comments suggesting that the hiring and placement system at ICARDA were not entirely objective. We were told instances of favoritism, hiring of relatives, and even seeming political patronage. The placement of employees sometimes did not match their qualifications, and in a few cases supervisors were expected to accept employees they did not want as transfers from other units.

We strongly recommend that ICARDA (i) prepare and adopt a comprehensive table of organization establishing the precise numbers, salary categories and job descriptions needed for each organizational unit; (ii) classify all positions by content and job title; (iii) fill all vacancies in authorized positions only in accordance with normal recruitment procedures; (iv) effect transfers only in accordance with the policies and procedures for filling vacancies; and (v) stipulate promotions can only take place in the same fashion or, in special circumstances, on the basis of 'present incumbent only'.

7.9. Duration of Employment Contracts

In its employment contracts ICARDA follows a policy of offering continuing employment after a probationary period. The contracts are not time bound. Is this conducive to eliciting the best performance; is it prudent, given financial uncertainties within the CGIAR system; and most important, do the centers want to be seen as offering a total career of
employment? Even with the best personnel policies providing for termination of employment, it may be very difficult for an institution to avoid becoming stale and falling behind in a field of rapidly advancing technology. Further, different and shifting skills may be required as time goes along. The best interests of a center may be served by a steady flow of talent in and out. We recommend that ICARDA examine the feasibility of introducing time-bound employment contracts, particularly for scientific and managerial staff.

7.10. Performance Appraisal and Feedback

Annual performance appraisal is prescribed in the personnel policies, but for a significant number of employees the appraisals are not used for constructive purposes and the procedure for doing them is weak. Many employees are not told about their evaluations, nor do they have a chance to discuss them with their supervisors or participate in their own evaluation. Appraisals are primarily done for pay purposes, but even then higher management has overruled or disregarded the appraisals done by lower level management of their own subordinates.

The appraisal "system" in use is rudimentary. It does not permit comparison across programs or supervisors and is not linked to merit pay increases. We heard of little use of performance appraisal for employee development. In a strong appraisal system, evaluations are done jointly by employees and their supervisors to describe employees' skill or performance areas that could be improved through developmental efforts. Such appraisals require more than a cursory rating scheme, and the employee and supervisor must be genuinely interested in improving the employee's performance. The supervisor's job is to determine what skills and abilities the employee needs to do his or her job well or better and to prepare for career advances as opportunities become available. It is in the employee's best interest to participate in the exercise for personal and job growth reasons.

We strongly recommend that ICARDA develop and put into operation a comprehensive performance appraisal system.

7.11. Benefits

Benefits were at the core of most of the comments we received about the "personnel system". Several of the points about schooling are covered elsewhere but, in general, ICARDA is having to live with decisions made earlier and some practices that have been followed for a long while.

7.11.1. Housing. Housing in Aleppo is an issue to many staff members. A major concern was about allocation of furniture and responses to requests for maintenance services. The major comment was that these items received differential responses depending on the status of the employee, a situation they considered unfair.

The Housing Office leases housing for the P staff (Q staff are on their own). A relaxed view of the present ICARDA rental ceiling of SL 80,000 per annum has been taken, with advice being given that staff can pay
more if they wish to do so out of their own pockets. Staff feel adrift in this situation, some believing it would be better if they assumed the responsibility for leasing property themselves. We suggest that ICARDA study the alternative of P-level staff themselves leasing their houses, keeping in mind that expatriate staff may well find themselves in very unfamiliar territory if they do so. Regardless of the method used to assist staff with housing, we recommend that ICARDA make all payments for housing in Syria in Syrian pounds.

7.11.2. International School. School staff morale is low and there have been instances of serious delays in getting new teachers approved and paid. The teachers see themselves as "second class citizens", poorly treated by the ICARDA personnel system and socially excluded from the larger ICARDA community. The Principal has had to spend undue amounts of time working at Tel Hadya with the Personnel Officer and Physical Plant Department on the school’s problems. The teachers have a number of grievances relating to pay and benefits but feel unable to engage ICARDA management in any effective dialogue on these matters. A brief review of the record indicates management has responded gingerly to these complaints and then largely on paper, not by face to face discussion. We suggest that ICARDA management meet regularly with the school’s staff to discuss their concerns.

We also suggest that ICARDA examine again whether it wants a school providing a complete secondary education. As grades are added, costs will increase considerably. New specialized teachers will have to be hired and additional space provided. A considerably expanded library and additional science facilities will become a necessity. It is conceivable that these additional costs can only be met by admitting more non-native English speakers and/or not paying any educational allowance to those staff who wish to send their children outside Syria to complete their secondary education. It is a decision that should not be taken on the basis of income-generating factors alone. We agree, however, that ICARDA should help maintain a quality international school in Aleppo, otherwise it will be difficult to recruit and retain international staff. Center staff should be encouraged to send their children to the school.

7.11.3. Vehicles. Presently, all P-level staff are assigned an ICARDA-owned vehicle which can be used for official or private purposes. Alternatively, he/she can use this vehicle only for official purposes and obtain an advance up to $8000 to help finance a second vehicle for private use only, the advance being liquidated by crediting an annual car allowance of $2000 plus interest against the outstanding balance. Each Q staff member (Q1 appointed after 1 January, 1983, upon completion of three years of service) is assigned one vehicle which may be used for both purposes. As a result, P and Q staff together have exclusive use of approximately 100 vehicles. Very few, if any, of the P and Q staff use the ICARDA bus service. The fact that ICARDA reimburses these staff for their fuel costs of going to and from work encourages this practice.

A reform is clearly in order. One approach would be to devise a formula for determining the number of vehicles to be assigned to a program
and to give the program leader control over their utilization. Official vehicles would not be available for private use. Second, even if this measure is not taken, we recommend that ICARDA stop reimbursing staff for commuting fuel costs. A separate bus service for P and Q2 staff might also ease the transition to a "public transport" approach.

7.11.4. Training. A benefit requested by some of the S and T scientific staff was the chance to pursue advanced education in Syria or elsewhere. Many of these staff are college graduates, and they want to advance themselves. The proposed human resource management policy should address this issue. University of Aleppo officials expressed interest in developing stronger ties with ICARDA, and it would be wise to explore this local potential for training of ICARDA staff.

We commend the Director General for having participated in the executive management development program organized by the CGIAR Secretariat for the CGIAR center directors. We understand that four ICARDA senior managers, including the Deputy Director General (Research), are to attend a similar program this summer. Such inter-center courses should be useful as they provide a forum for exchange of ideas and experience among the senior staff of the centers. But more needs to be done. We suggest that ICARDA make arrangements for having its managers attend a thorough management-skills course, preferably one designed for research institutions.

Finally, we suggest that ICARDA consider providing the following additional benefits: day-care for children of working mothers (including daily field labor), for which proposals have been submitted; sale of portion of surplus grain to national staff; credit union or similar arrangements for national staff; and a recreation and sports facility for staff.

7.12. Communication

There are some barriers in communication from the top managers to the rest of the center's employees, and the reverse is also true. To ensure adequate upward communication usually requires management initiatives to solicit information. Some managers use representative committees of employees to tell them what is happening in an organization, and other managers follow the practice of "management by wandering around" rather than being too bound to one's desk. An incident such as the regional staff demonstration in November 1987 might have been handled before it reached heated levels if better information mechanisms had allowed sensing the problem beforehand.

There are some problems of communication across the boundaries of ICARDA's organizational units because of the strong program and function emphasis.

An area that may harbor more communication problems than first impressions would suggest is communication between ethnic groups at the center. The issue probably exists at other CGIAR centers as well. Subtle cross-cultural differences or prejudices can produce more misunderstandings
and lack of cooperation than is easily discernible. For instance, we were told that Indians experience more prejudice than other groups at the center and in Aleppo, and that the Syrian staff felt undervalued and relatively unable to be promoted. We do not offer these as true statements, but they indicate residues of communications people have received that can color their experience and work performance as ICARDA employees. We believe it would be useful to try to understand some of the frames of reference of members of different ethnic groups. One way might be to hold a meeting of employees of a similar ethnic group and to probe for felt offenses they have about the perception of them or their treatment. Then steps could be taken to produce more positive understandings of each other. These procedures require skill in assessing communication problems as well as in designing and implementing action programs. We see this activity being sponsored by a forward-looking human resource management function.

A major device to correct internal communication problems is to use constructive feedback. Giving feedback comes naturally to some people, but most of us require training in how to do it. Organizing such training could be a responsibility of the human resource management unit.
8. GENERAL ADMINISTRATION

Under the Director General, the Director of Administration manages a wide range of activities, nine units according to the panel's count based on an organigram of ICARDA prepared by him dated November 25, 1987. (See Appendix 3.) These activities are human resources, purchasing and supplies, physical plant, administrative services, visitor services, the international school and the Damascus, Beirut and Amman offices of the center. In addition, the Director of Administration is responsible for security and "public relations". Among the major departments, Purchasing and Supplies is highly regarded by its clients. Whether because policies are not enforced or the performance is below an acceptable standard, the same thing cannot be said of the Human Resource or Physical Plant departments. The housing and travel offices have major problems. The international school presents a different kind of issue, namely the role of ICARDA in its management. With the exception of human resources and housing, which are covered in Chapter 7, the remaining components of administration are discussed in this chapter.

8.1. Director of Administration

The incumbent director has been on the job for a year and a half. When he joined ICARDA, he came into a situation in which the administrative units had been dispersed for several years and were very dependent on the support of the then Director General. The institution was rife and redolent with rumor, gossip, innuendo and finger pointing. Since the then Director General's departure, the Director of Administration has faced many tough challenges. With the exception of the Purchasing and Supplies Department, the critical units under his direction do not appear to be performing well.

We did not get the impression that the Director of Administration had the full support and confidence of ICARDA's staff. To be effective, administration must have both. Popularity is not the name of the game, but respect is. This can only come from performance, seen to be efficient and equitable.

It will take a considerable effort to bring things around in this department. Policies and procedures will have to be developed which are reasonable and are followed; the right people will have to be put in the right positions; and performance will have to be monitored and insisted upon.

8.2. Purchasing and Supplies Department (PSD)

The Purchasing and Supplies Department (PSD) handles all purchases of equipment and supplies and at the end of May 1988 took on procurement of services as well. It directly receives all deliveries and manages all of ICARDA's stores, including fuel and lubricants. It is respected by the staff for its performance. It has strong leadership, a very professional staff, well laid out policies and procedures, and a reputation for getting things done.
Over a period of several years top management has on significant occasions deeply involved itself in purchasing, particularly of services. The recent decision to vest in PSD responsibility for services procurement is an excellent one and we fully support it.

While PSD generally, although not always, determines what is to be purchased through the Beirut office, the buyers in the Beirut office now report to the head of that office and not to PSD. We suggest that the buyers in the Beirut office be transferred back to the control of PSD.

During the long period when the position of Director of Administration was vacant, PSD was shifted about and was under the Financial Controller at the time the present Director of Administration arrived. Now it reports directly to him. The question has been asked of us as to whether PSD should be under the Finance Department or under the Administration Department. Financial managers do not, per se, bring to bear by way of training or outlook any particular expertise in supply management and in fact may be so concerned with "control" that operational performance may suffer. Further, if the concern is with potential fraud and/or misuse of funds, the combining of purchasing and finance in the same organizational unit may in fact enhance the possibility of these things occurring. For these reasons we recommend that PSD remain within the Administration Department. As suggested in Chapter 6, store ledgers should be maintained in the Finance Department. Further, given the magnitude and importance of the work of PSD, we suggest that PSD should continue to be headed by a P-level appointment.

8.3. Physical Plant Department (PPD)

The Physical Plant Department (PPD) is a recent and large creation, bringing together equipment (other than farm), vehicle and civil works (including housing), maintenance and repair. With the main construction at Tel Hadya nearing completion, ICARDA personnel working on construction have been absorbed into PPD. Whether because of this or other personnel shifts, severe dissension exists within the department and it is generally regarded as poorly managed and unresponsive to customer needs. Given the size of the department and its importance to the smooth functioning of the center's physical plant, we strongly recommend that PPD be headed by a person with P-level experience and qualifications.

Since the principal structures at Tel Hadya have only recently been completed, their maintenance and repair may not present major problems in the short-term. With this enlarged physical plant, and also because of the nature of some of the equipment and materials used in its research, ICARDA needs to pay closer attention to safety. We recommend that a qualified person be designated as safety officer and an active safety awareness program be instituted.

The vehicle workshop appears to operate satisfactorily and there are no reported backlog problems. A concern expressed to us was that the farm equipment workshop might be placed in PPD. We suggest the farm equipment workshop remain with Farm Operations under the Deputy Director General (Research) since it is reported to give good service, is well managed under
Farm Operations and, most importantly, its work is crucial to the research on the farm.

Maintenance and repair of ICARDA structures in Aleppo, including the school and housing for P-level staff, were formerly done by ICARDA personnel based in Aleppo. This work is now the responsibility of PPD operating out of Tel Hadya. The service rendered to these clients is reported to be slow, not well done and sometimes never completed. The panel suggests that ICARDA consider the reconstitution of the Aleppo maintenance and repair activity again under the jurisdiction of the housing office.

8.4. Travel

Another activity reported to produce noticeably laggard results is the travel office. The travel officer has no staff and therefore is often unreachable. Tickets are said habitually to be delivered at the last minute and not infrequently with mistakes or awkward itineraries. There seems to be little direct interaction between the travel office and its clients. The financial management of this activity also appears to be deficient. To overcome these difficulties ICARDA intends to replace its direct-hire travel officer with an airline/travel agency which would set up an office at Tel Hadya.

In travel, there are no pat solutions. Typically, performance depends almost entirely on the competence of the individual doing the work. Private travel agencies are not per se a panacea for the ills seeming to afflict this business. In choosing a travel agent, ICARDA will need to be satisfied that the person actually doing the work is competent and has a good reputation with travellers. In evaluating private travel agents’ offers and then negotiating a contract, PSD should act for ICARDA, as is now prescribed in ICARDA policy for contracting of services.

8.5. Administrative Services

Grouped in this unit are the motor pool, the Tel Hadya clinic, catering, cleaning (done under contract), and travel (which is discussed above).

The motor pool serves Administration’s needs and has a small number of vehicles to meet the requirements of programs which cannot be met with their own vehicles.

A small clinic is operated with a nurse who is on duty during working hours. ICARDA has a physician on retainer in Aleppo, who visits Tel Hadya twice a week and is available for emergencies. These arrangements appear insufficient given the number of people working at Tel Hadya and the risk of accidents there. The panel suggests that ICARDA examine the feasibility of having a physician stationed at Tel Hadya during working hours and seek professional advice as to whether the physical arrangement and equipment at Tel Hadya are adequate given the fact the nearest hospital is in Aleppo, 30 km. away.
Until recently ICARDA intended to provide food services at Tel Hadya with direct-hire staff. Because of budget stringencies a decision has been taken to contract for these services. We suggest that ICARDA proceed expeditiously in having food service provided at Tel Hadya since the large capital investment in new kitchen equipment there has been sitting idle for close to a year.

Cleaning is done under contract. The decision to enter into and negotiate the contract for cleaning services seems to have been taken without any cost-benefit analysis. The selection of the contractor and the contract negotiation are reported to have been done by the former Director General himself. The contract is in Arabic, which is not the language of ICARDA and no authorized agreed-upon English version exists. There appears to be a lack of consensus as to its financial provisions - $130,000 per year over two years or, as ICARDA's legal adviser in Damascus interprets it, a lump sum of $130,000 for two years. Much of the actual performance is in the hands of other than the nominal contractor. A peculiar arrangement existed under which ICARDA was to purchase for the contractor two vehicles carrying ICARDA license plates. This has been changed to one paid for by the contractor which, however, still carries ICARDA license plates. General scepticism exists among the scientific staff regarding the quality of the contractor's performance.

Given the circumstances surrounding the contract, the panel suggests that the Director General establish a small task force to (i) review all matters pertinent to the cleaning contract; (ii) analyse how cleaning services should be provided; and (iii) prepare a report on its findings and recommendations. This should be done as a matter of priority.

8.6. Visitors and Public Relations

Visitors and Public Relations come under Administration. The Beirut, Damascus, and Amman offices also report to the Director of Administration. Visitor services has responsibility for conferences, visitors, trainee accommodations and airport services.

The visitors service operates four guest houses, two in Damascus and two in Aleppo. The smaller of the two Aleppo guesthouses is to be converted to a second building for the ICARDA school as it expands the number of classes beyond nine. We support the plan to upgrade the Damascus guesthouse facilities. To date they seem not to have well served the needs of ICARDA's visitors and staff.

ICARDA leases 15 apartment houses in Aleppo capable of accommodating 120 trainees. Kitchen facilities are available but ICARDA provides no catering services for the trainees. They are reported not to be very happy about this. ICARDA's plans call for the construction of living accommodations for trainees at Tel Hadya but funds are not yet available to do so. The isolation of Tel Hadya may not be conducive to good trainee morale. The panel suggests ICARDA consider keeping the trainee living facilities in Aleppo and make adequate provision for food services there.
Concerning conferences and the substantive side of visitors programs, the panel is of the opinion that it might be more appropriate to assign these functions to the unit responsible for international cooperation. The activities designated as public relations, namely obtaining of resident permits and visas, and providing "local services", do not seem to constitute "public relations" but rather an assortment of routine administrative tasks. We believe these activities should be placed under Administrative Services. As to the generally accepted concept of "public relations", this activity should be in close proximity to the Director General and better linked with the Scientific and Technical Information Program (STIP).

A key activity of the Beirut office, i.e. purchasing, has already been discussed. Regarding the Damascus office, we see a need for it to be upgraded. As suggested in Chapter 5, we believe this office should be assigned to the Assistant Director General for Government Liaison. Relations with the Government of Syria could then be handled at the seat of government.

8.7. Security

In addition to his responsibility for hiring daily labor, the labor officer has recently taken on the additional job of security officer at ICARDA headquarters. Although not trained in security matters, as an ex-army officer he has good ideas on how to professionalize the guard force. His standing in the local community is a distinct plus.

Security has a wider meaning and significance in a country such as Syria. It is technically in a state of war with one of its neighbors and has a long frontier with another, Lebanon, a country marked by severe political instability. Understandably, therefore, the Syrian Government is concerned with internal security and this is a fact of life recognized by all working and living in Syria. Visitors should know, however, that, from our experience, the country is a very pleasant one with a friendly, welcoming people. Officials are polite and carry out their duties in an efficient way. Visitors to Syria can feel safe and secure, more so than in some other parts of the world where CGIAR centers are located.

8.8. International School

The school is under the direct control of ICARDA's management. All the employees of the school are ICARDA employees. A School Committee nominated by the management advises on school matters but appears to be dominated by persons in senior management posts. The Director of Administration chairs the committee. The school's budget is submitted to ICARDA for approval. ICARDA, through PPD, is responsible for maintenance and repair of the school building.

The school has nine grades now, offering a British/American type curriculum, and the intention is to develop the school to university-entrance level by adding three additional grades. A large number of non-native English speakers living in Aleppo have been admitted, requiring the hiring of two English-as-a-second-language teachers. The "management"
arrangements seem to leave little autonomy to the school administration. Physically the school is very attractive and the teaching staff seems well qualified.

ICARDA should ask itself whether it wishes to "manage" the school. Top management is already overburdened and it may be wise to give greater autonomy to the school. We suggest ICARDA consider changing the School Committee to something more akin to an elected school board having responsibility for the governance of the school with some ex-officio representation from ICARDA's management. Employment policies, hiring and firing of teachers, budgeting, setting of fees and possibly maintenance and repair could become the direct responsibility of the school board and the principal. The Director General may still wish to approve selection of the principal but this could be done on the recommendation of the school board following normal recruitment procedures. The school board would have to exercise self-discipline and take the pledge not to interfere in the day-to-day running of the school, which should be the sole responsibility of the principal.

8.9. Insurance

For P staff, ICARDA through IIE has the usual arrangements with van Breda in Belgium for life, medical and accidental death and disability insurance. Presently, for life insurance, the amount is five times annual salary. For regional staff, ICARDA, through the Affiliated Insurance Company in Lebanon, provides similar insurance, although for life insurance the amount is two times salary. ICARDA intends in the future to provide life insurance for both groups at three times salary, which is the practice in many of the CGIAR centers. ICARDA also carries insurance for (i) personal effects in transit and official shipments; (ii) fire risk for buildings and other fixed assets in Lebanon; and (iii) fire and theft risks for inventory items and computer equipment at Tel Hadya. It does not carry (i) comprehensive risk policies for all property at Tel Hadya, Aleppo or Lebanon; (ii) vehicle insurance; or (iii) crime insurance to protect against employee fraud, embezzlement, etc. The panel recommends ICARDA expand its insurance coverage so that all real and personal property, including vehicles, is covered.

8.10. Property Disposal

Disposal of property imported into Syria duty-free can present practical problems under Syrian law. It can only be sold to other duty-free entry holders. Otherwise, it must be re-exported or destroyed.

ICARDA appears to have no well defined criteria for deciding when property should be declared surplus or procedures for subsequent disposal. Decisions seem to be made on an ad hoc basis. This is notable in the disposal of some vehicles which have been effectively "disposed" of, but ICARDA retains ownership and the vehicles carry ICARDA license plates. We are pleased to note that the ICARDA management is in the process of reclaiming these license plates and striking the vehicles from its records. Nevertheless, we suggest that ICARDA assess and, if necessary, revise its criteria, policies and procedures regarding disposal of property.
9. INFORMATION MANAGEMENT

Information is the reason for a research center's existence. A center's products are research results or information to help produce change. Information feeds a center and governs much of its activity. We cover management of information as a topic in our report because information is a key resource, just like human, physical and financial resources, and, as such, should be managed in the most effective and efficient manner. As in the case of other resources, the way information is managed will affect the overall performance of the center.

9.1. ICARDA as an Information System

ICARDA can be thought of as a system that takes in information, transforms it, and produces it in forms that are most useful to other systems. To be seen as effective, the system should have few influences distorting the flow or meaning of information, and it should have information products of value both inside and outside the center.

Concerning information coming into ICARDA, the impression gained is of a system which is relatively closed because of barriers at the boundaries which hinder information flow. The major example of a barrier is the restriction on information communicated via computer with other scientists, networks, libraries or data bases. Relative to other international centers, this is a serious hindrance to information movement into ICARDA.

ICARDA can live with this barrier up to a point, but serious costs start to build up over time. The costs include frustration, inadequate contacts with changing scientific environments, inability to communicate effectively with ICARDA's outreach operations, difficulties in recruiting and retaining computer-literate scientists - especially young ones who can stimulate ICARDA's scientific community, a bias towards having scientific staff who do not focus on computer information technology, and the inability or interest to work on certain kinds of scientific questions or methodologies. Electronic communication, such as electronic mail and the use of networks, has led to profound changes in scientific communities elsewhere, and most of these changes cannot occur at ICARDA because of the barrier. The end result we fear is of ICARDA increasingly losing ground compared to other research organizations that have all the tools of modern science and management communication at their disposal.

Another important aspect of ICARDA as an information system is the information flow and processes inside ICARDA. How much stored information does ICARDA have for its own and others' use, and how good are its internal resources for communicating with itself? The Scientific and Technical Information Program and the Computer Services section include repositories of internal information, and we will comment on them later.

Internal information, as we are using the term, usually refers to applications of management information systems, and to the more personal and informal information processes of an organization. First, considering
management information systems, their development is at the formative stage at ICARDA. Some of the administrative units have advanced further than others, but much needs to be done. The operation and use of financial reports has already been discussed in Chapter 6. If ICARDA moves to a project-based budget system or a cost accounting system, many other records and reports will be involved. The records in purchasing and stores are quite good, but the fixed asset register is not yet fully implemented. The farm manager said he did not yet have at his disposal a computerized record of plot research histories. As new management information is produced and greater electronic capacities become available, new needs for management information typically are discovered.

ICARDA needs to think of information as a means to an end, not an end itself. In management, information is needed primarily for decision-making. It is therefore necessary to identify first the decisions to be made on a regular basis (by the Board, management and staff) and the types of criteria used in making these decisions. The criteria can then be studied in terms of their information requirements. This can be followed by the development of systems which can generate the required information in the form needed.

In information matters, more is not necessarily better. It is easy to "snow" a manager with information of little use. The Board, for example, has very little time to discuss matters and the information presented to it must be concise, precise and to the point. We recommend that ICARDA examine the information needs of the Board and develop the systems necessary for providing it. The same applies to the information needs of the directors, unit managers, project leaders, etc.

The second part of internal information refers to the organizational behavior aspects of communications. People speak, write, give body language, or even try to avoid communications with other people. What are the issues involved in this kind of communication and information exchange? Generally, communication problems exist in this realm if there are errors, avoidance, lack of attention and unintended bad social effects associated with communication. We did not carry out a thorough communication audit at ICARDA but, in general, our impression is that the center does not appear to have major problems in this area.

The last element of ICARDA as an information system is the production of information for use by other systems. The information distributed, not just produced, by ICARDA is its major product and it is the purpose for all the other work of the center. To determine if ICARDA is doing a good job requires an analysis of who should receive its information, what information the different sets of recipients should receive, the quality of the information being sent, and the effects of the information in terms of the intended effects.

Such analysis requires defining two sets of recipients of ICARDA's information: (i) those organizations or influential persons who enable ICARDA to exist, and (ii) organizations or persons who use ICARDA's information to improve food production or scientific knowledge. We can call
these two sets enablers and users. Examples of enablers are donors, sympathetic sponsors, or government or other persons who can affect ICARDA's operations or help create impressions of the center in decision-making settings. They include ICARDA's support system and persons who are key in assisting ICARDA's programs. It is necessary to make sure they have information that accurately and succinctly portrays the center. The end result sought is a favorable impression of ICARDA.

Examples of users are scientific communities, research centers, libraries and other repositories of scientific and international agricultural development information, regional scientists and extension agents, and national agricultural research systems. Relative to such users, the desirable end result is a favorable impact on the scientific community or actual changes in agriculture, research and practice.

Given sufficient resources, ICARDA might assess the effectiveness of its communication products according to the relevant audiences, the quality of the information given to each audience, and the effects of the information on them.

9.2. Information Management at ICARDA

Every unit at ICARDA produces information, but three are formally involved in the task: (1) the Computer Services unit under the Director General, (2) the Scientific and Technical Information Program under the Deputy Director General (Research) and (3) the communication unit under the Director of Administration. The first two were reviewed by the concurrent EPR and we will try not to duplicate its good work except in summary form.


The center has maintained a main-frame emphasis. Issues about this approach have concerned scientists wishing direct access to the compiler and microcomputers. A number of computer-literate scientists would like to be able to write or use some of their own programs on the main frame, but Computer Services has resisted. The scientists believe their work has been hindered. One serious example we heard described a scientist who came to work at the center after conducting research elsewhere using a set of his own programs. He gave the discs containing his programs to Computer Services for review. He has not received back the discs and he is considering leaving ICARDA because he has difficulties doing his research.

The introduction and increasing use of microcomputers at ICARDA will relieve some problems for the scientists, such as the delays in getting on the main frame, and being able to use non-ICARDA software on their micros. For those scientists who want to use the main frame and program some of their own work, the problems have not been resolved.

The Computer Services staff is heavily loaded with work, but one reason appears to be the undue effort being directed at producing software...
unique to ICARDA. Much similar software should be commercially available for use on microcomputers. We suggest the Computer Committee examine existing software packages against programs being developed by Computer Services, and make recommendations of commercial software for use on microcomputers when it represents money savings and reduction of the scientist's complaints. Too, we note that the Director of Computer Services is chairperson of the Computer Committee. This is inappropriate.

Reasons given for the restrictive policies applied by Computer Services are (1) the Syrian Government is concerned about the uncontrolled use of computers, and especially of electronic mail or library search systems, and (2) if new hardware and software are allowed to proliferate, the Director believes he will have to maintain them and he already has a too busy schedule. We strongly recommend continued efforts to loosen the Syrian restrictions on ICARDA computing and electronic data transfer, including access to CGNET. Provisions should be made so the Syrian authorities can read any data base, program or message that is transmitted. The restrictions as they exist can only harm ICARDA's reputation as an international research center.

9.2.2. Scientific and Technical Information Program (STIP). STIP is much involved with producing finished copies of information going from the center to enablers and users. It is also responsible for soliciting, collecting and maintaining information for use by ICARDA scientists and trainees. It has a mandate to train in documentation, library management, editing and writing. The unit disseminates information mainly in English, some in Arabic, and occasionally in other languages.

The library appears to be doing an excellent job under the constraints it is facing. However, ICARDA's isolation from the outside world in terms of electronic communication severely limits the library's effectiveness as a one-stop information center within the organization.

The morale of the STIP staff is not high. They see themselves as the orphans of the center and believe that many of their positions are under-valued. There are several vacant positions and recruitment of staff seems difficult. We suggest that a salary survey be conducted to determine if the job classifications and salaries in STIP are out of line.

As already noted, we were not able to undertake a proper analysis of the effectiveness of ICARDA's publications. We encourage such an assessment.

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1/ It is pertinent to quote the 1984 EMR on this point: "The Panel strongly believes that software development is an important decision area where cost benefit principles should apply....We think that ICARDA should assign priority to providing computer initiation and seminars in standard software use rather than always design problem-specific software. In addition, by developing its own problem-specific software ICARDA must beware that it does not place itself in isolation from other research institutions with which it needs to cooperate."
A usual problem is that an organization goes along believing that good things will happen if it produces attractive reports and sends them to a mailing list. An assessment should be done to learn what effects actually occur because of ICARDA's communication of its products.

STIP staff have demonstrated a willingness to be helpful to the scientists and to be a positive force in the region. We commend them for their attitude. One complaint from the staff was that at times the pressure on the unit can be very high, and there are not good rules to help decide which work should come first. We second the suggestion of the EPR panel that a policy be established to determine the priority of work to be accepted and completed in STIP's production units.

9.2.3. Telephones, Telexes, Mail and Couriers. The telephones and telexes are in a communications unit under the Director of Administration. ICARDA operates four telex machines, two at Tel Hadya, one in Aleppo and another in Damascus. It plans to install another in the Purchasing and Supplies Department. Service is adequate but subject to brief power outages. The security of the telex operation is not satisfactory, particularly for management. Several secretaries are permitted to operate the telex machine in the management area and the telex room is locked only at night. When this machine is not working, the other machine can receive messages to the Director General, even though each machine has its own number. One person said "The Director General is often the last to know his messages".

Telephone service at Tel Hadya is through a line to Aleppo. The line is frequently out of operation and often during lunch and non-business hours there is no English-speaking operator. International telephone service is erratic. ICARDA has made arrangements to install a 12-channel coaxial underground cable for its own use between Tel Hadya and Aleppo. It also plans to establish a radio telephone service between the two locations.

Mail service is slow. Daily courier service is available and is used. ICARDA is planning to institute a mail registry system.

9.2.4. Records Management. Records and files are maintained by individual units. No central archives exist, but the Directors of Computer Services and Administration have submitted a proposal to the Director General to establish one, utilizing computer systems and microfiche. Three document shredders are in operation. We suggest ICARDA place high priority on the establishment of an archive and a center-wide records management system.
10. ICARDA TOMORROW

Today, science at ICARDA is strong, management and administration less so but on the mend. While the day-to-day administrative operations have moved along uncertainly, they have not yet affected seriously the effectiveness and excellence of the research effort. Today, to ensure success tomorrow, the leadership must act decisively. The present condition is just an irritant but it could well weaken the ability of ICARDA's scientists to continue to do first-class work. Management must dedicate itself to take organizational, policy, personnel and procedural measures to prevent further slippages in performance.

ICARDA must work as a team if it is to succeed in the future. This means both people and units will have to act in harmony and close collaboration. Strong leadership; better communications, both vertically and laterally; an insistence on excellence in performance; management by well-thought-out rules rather than exception; sensitivity to people as people; a clear definition of goals and values; and clearly enunciated strategies, policies and procedures - all will combine to produce a team dedicated to excellence in its work.

Where it all begins is at the top, providing the vision and the example. But leadership must not end there. Every manager, down to the lowest level supervisor, must feel he has an obligation to create visions for his unit's future, gather support for them, and put his visions into reality with strong conviction and persistence. The future of ICARDA should be the business of every manager.

Excellence and teamwork should be the cornerstones of ICARDA's new strategy. The strategy, and the visions it contains, should be seen by all concerned as the "right" way ICARDA should proceed. The strategic plan should not become another document on the shelf; it should be carefully translated into action. This may call for significant changes in how ICARDA does its work. The staff should be given a chance to adjust to the new ways. Over time a new "ICARDA way" should emerge, one of which the Board, management and staff are proud.

Too, ICARDA must continue to pay close attention to its relations with the host country. Day-to-day contact with government ministries and agricultural research organizations will be essential, combined with a punctilious approach to doing the right thing. The integrity of ICARDA and its staff must never be a matter of question to its host.

Relations with institutions outside Syria must also be nurtured constantly. ICARDA must feel that it is fully aware of the changes taking place outside of itself at all times and what it needs to do to remain effective in a changing world. It must continue to build and expand its friendship networks around the globe and take comfort in the knowledge that others are concerned about ICARDA's interests as well.
A number of small things will make a big difference. Personnel actions must follow well-understood and administered policies and procedures. Exceptions must not be the rule. Workshops, offices, laboratories must be kept continuously neat and clean. Maintenance and repair of equipment, structures and housing must be prompt and well done. Bills must be paid on time. Financial reports must be available in timely fashion. Travelers must receive their tickets in good time, not as they go out the door to start their journeys. Grievances must be responded to quickly and fairly. No matter what the job or activity or its location, excellence must be the norm.

Quality is the product of attention to a myriad of small tasks and details. ICARDA can attain the former by mastery of the latter. Creativity and innovation should not, however, be stifled for the sake of attention to administrative detail.

The ICARDA of today is already better than that of yesterday. The ICARDA of tomorrow, we predict, will be excellent.
APPENDIX 1. LIST OF RECOMMENDATIONS AND SUGGESTIONS

Chapter 2. Organizational Culture

We strongly recommend:

- ICARDA, as part of formulating its long-term strategy, determine the values that should guide the institution as it moves into the future.

Chapter 3. Legal Status and Governance

We strongly recommend:

- the Board take immediate steps to strengthen its performance.

We recommend:

- the ICARDA Board seek expert legal advice on the status of its agreement with Syria and make a considered judgment on whether or not to seek its amendment in any regard.

Chapter 4. Research Management

We strongly recommend:

- ICARDA institute a project budgeting system and assign a significant degree of budgetary authority to project leaders.

We recommend:

- ICARDA consider introducing a matrix structure for organizing its future research work.

- ICARDA consider abolishing the Deputy Director General (International Cooperation) position after the retirement of the present incumbent and reassign most of its responsibilities to a newly created "Coordinator-International Cooperation" position reporting to the Deputy Director General (Research).

- ICARDA critically assess the suitability of its current monitoring and review systems to its future needs, in the light of its strategic plan, medium-term program, and project-based matrix management system.

We suggest:

- the Director General review the existing committee structure in the light of other structural changes.

- ICARDA examine its current operational planning processes to introduce modifications as the center moves towards medium-term programming and project-based matrix management.
Chapter 5. Operations Management

We strongly recommend:

- ICARDA consider establishing a new Deputy Director General position in place of the Deputy Director General (International Cooperation) and designate it as "DDG-Operations" or "DDG-Management".

We recommend:

- ICARDA establish an Assistant to the Director General position for providing secretarial services to the Board and for coordinating donor relations.

We suggest:

- ICARDA consider assigning the Damascus office to the Assistant Director General for Government Liaison.

Chapter 6. Financial Management

We strongly recommend:

- a qualified internal auditor with responsibility for both financial and operational auditing be appointed without delay.

- the Board establish an Audit Committee without delay.

We recommend:

- ICARDA proceed cautiously in the implementation of a cost accounting system so as not to delay the introduction of higher priority reforms in financial management.

- the Computer Services unit introduce the long-awaited enhancement to ICARDA's Management Accounting System.

- the fixed asset registration system be fully implemented as soon as possible; that responsibility for its implementation be with the Purchasing and Supplies Department; and that the finance department not finalize payment unless the relevant documentation received from the Purchasing and Supplies Department includes the tag number.

- ICARDA's Board specify the investment policy that ICARDA management should follow.

We suggest:

- ICARDA management, with the assistance of the Board, develop and implement a fund-raising strategy aimed at expanding its funding base.
the Board periodically review its exchange policies as circumstances change.

outreach programs, including the Beirut office, operate on a revolving imprest account based on a pre-determined initial advance, to be replenished on the basis of actual approved expenditures and upon submission of adequate disbursement vouchers.

the store ledgers be maintained in the Finance Department so that stocks can be controlled through a segregation of duties.


We strongly recommend:

- the appointment of an internationally recruited human resources manager to head the personnel unit.

- ICARDA (i) prepare and adopt a comprehensive table of organization establishing the precise numbers, salary categories and job descriptions needed for each organizational unit; (ii) classify all positions by content and job title; (iii) fill all vacancies in authorized positions only in accordance with normal recruitment procedures; (iv) effect transfers only in accordance with the policies and procedures for filling vacancies; and (v) stipulate promotions can only take place in the same fashion or, in special circumstances, on the basis of "present incumbent only".

- ICARDA develop and put into operation a comprehensive performance appraisal system.

We recommend:

- the Board abstain from direct involvement in the detailed formulation of personnel policies.

- ICARDA establish an orderly and systematic policy for granting increments to P-level staff for both cost of living increases and merit.

- the use of reliable salary surveys of positions similar to those at the center in local, regional, and international markets, where appropriate, but taking account of actual income obtained by those surveyed for the actual effort they put in.

- ICARDA examine the feasibility of introducing time-bound employment contracts, particularly for scientific and managerial staff.

- ICARDA make all payments for housing in Syria in Syrian pounds.

- ICARDA stop reimbursing staff for commuting fuel costs.
We suggest:

- ICARDA establish steps within each grade of regional staff, integrated with a job classification and appraisal system.

- ICARDA study the alternative of P-level staff themselves leasing their houses, keeping in mind that expatriate staff may well find themselves in very unfamiliar territory if they do so.

- ICARDA management meet regularly with the school's staff to discuss their concerns.

- ICARDA examine again whether it wants a school providing a complete secondary education.

- ICARDA make arrangements for having its managers attend a thorough management-skills course, preferably one designed for research institutions.

- ICARDA consider providing the following additional benefits: daycare for children of working mothers (including daily field labor), for which proposals have been submitted; sale of portion of surplus grain to national staff; credit union or similar arrangements for national staff; and a recreation and sports facility for staff.

Chapter 8. General Administration

We strongly recommend:

- Physical Plant Department be headed by a person with P-level experience and qualifications.

We recommend:

- Purchasing and Supplies Department remain within the Administration Department.

- a qualified person be designated as safety officer and an active safety awareness program be instituted.

- ICARDA expand its insurance coverage so that all real and personal property, including vehicles, is covered.

We suggest:

- the buyers in the Beirut office be transferred back to the control of the Purchasing and Supplies Department.

- The Purchasing and Supplies Department continue to be headed by a P-level appointment.
- the farm equipment workshop remain with Farm Operations under the Deputy Director General (Research).

- ICARDA consider the reconstitution of the Aleppo maintenance and repair activity again under the jurisdiction of the housing office.

- ICARDA examine the feasibility of having a physician stationed at Tel Hadya during working hours and seek professional advice as to whether the physical arrangement and equipment at Tel Hadya are adequate given the fact the nearest hospital is in Aleppo, 30 km away.

- ICARDA proceed expeditiously in having food service provided at Tel Hadya since the large capital investment in new kitchen equipment there has been sitting idle for close to a year.

- the Director General establish a small task force to (i) review all matters pertinent to the cleaning contract; (ii) analyse how cleaning services should be provided; and (iii) prepare a report on its findings and recommendations.

- ICARDA consider keeping the trainee living facilities in Aleppo and make adequate provision for food services there.

- ICARDA consider changing the School Committee to something more akin to an elected school board having responsibility for the governance of the school with some ex-officio representation from ICARDA’s management.

- ICARDA assess and, if necessary, revise its criteria, policies and procedures regarding disposal of property.

Chapter 9. Information Management

We strongly recommend:

- continued efforts to loosen the Syrian restrictions on ICARDA computing and electronic data transfer, including access to CGNET.

We recommend:

- ICARDA examine the information needs of the Board and develop the systems necessary for providing it.

We suggest:

- the Computer Committee examine existing software packages against programs being developed by Computer Services, and make recommendations of commercial software for use on microcomputers when it represents money savings and reduction of the scientists’ complaints.
- a salary survey be conducted to determine if the job classifications and salaries in STIP are out of line.

- ICARDA place high priority on the establishment of an archive and a center-wide records management system.
APPENDIX 2. COST OF IMPLICATIONS OF EMR RECOMMENDATIONS

The panel has examined its recommendations with respect to personnel. Its analysis indicates a net increase in the order of $280,000 in annual costs resulting from establishing/upgrading the following positions.

<table>
<thead>
<tr>
<th>Position</th>
<th>Action/Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant to DG</td>
<td>new, P</td>
</tr>
<tr>
<td>Coordinator, International Cooperation</td>
<td>new, P</td>
</tr>
<tr>
<td>Human Resources Manager</td>
<td>new, P</td>
</tr>
<tr>
<td>Chief Engineer, PPD</td>
<td>upgrade to P</td>
</tr>
<tr>
<td>Physician, Tel Hadya</td>
<td>new, Q</td>
</tr>
<tr>
<td>Internal Auditor</td>
<td>new, Q1</td>
</tr>
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The panel believes many of its other recommendations would generate cost savings over time through:

a. better fitment of staff;
b. improved financial management;
c. more efficient management of PPD;
d. potential savings from improved cleaning arrangements;
e. no longer paying commuting costs to P and Q staffs;
f. reform of vehicle management;
g. payment only in Syrian pounds for house rental;
h. project planning and budgeting combined with modern cost accounting/charge-back system.
APPENDIX 4. TERMS OF REFERENCE
ICARDA EXTERNAL MANAGEMENT REVIEW

The terms of reference given to the panel were as follows:

1. The major objectives of the management reviews, as outlined in the July 14, 1983 memorandum from the secretariat entitled "Procedures for Management Reviews of the Centers", are as follows:

   (a) To provide the center with insights into the management effectiveness of the organization. These insights should assist the Board and center management in devising ways of improving the effectiveness and the efficiency of the center's operations.

   (b) To provide the Group, and particularly the donors, with information on the management effectiveness of the center and on problem areas that need to be addressed.

   (c) To ascertain whether the center management is receptive to change and whether the administrative, financial and other management systems are designed and operating efficiently and in ways that enable the center management to monitor progress, discover weaknesses and introduce corrective action.

   (d) To identify management practices at one center that may have broader application in the system.

   (e) To identify elements or circumstances that have important positive or negative influences on the center's efficiency: for example, practices of donors, regulations of the host country, and activities of the CGIAR system itself. Where appropriate, to suggest constructive change.

2. The second management review of ICARDA you are commissioned to conduct should broadly aim at the above-mentioned objectives. The emphasis should be on ICARDA's management effectiveness since the last EMR conducted in 1984. Also, you should pay particular attention to the management implications of ICARDA's current thinking on its future strategy.

3. The review will be conducted simultaneously with the External Program Review (EPR) during May 20 - June 10, 1988. The secretariat expects a short management review report, supplemented by technical appendices if necessary, that is well integrated with the report of the EPR panel.

4. Compared with the EMRs conducted earlier, the ICARDA EMR should:

   (a) indicate clearer priorities among the recommendations;

   (b) discuss more explicitly the cost implications of the recommendations;
(c) pay greater attention to creation of a managerial and administrative environment that is conducive to innovation;

(d) pay greater attention to the management issues concerning outposted staff and special/restricted core projects; and

(e) examine in greater depth aspects of organizational culture which have a strong bearing on performance.

The 1987 IRRI EMR report can be used as a model on many of these points.

5. I attach for your consideration the final list of issues for the ICARDA EMR prepared at the CGIAR Secretariat. This list contains both general and specific questions and has been prepared on the basis of: (1) comments received from the donors and other centers; (2) suggestions of the ICARDA Board and management on issues to be covered by the EMR; (3) the preliminary observations of the EMR panel made during its initial visit to ICARDA in January 1988; (4) the observations of the secretariat staff; and (5) general questions of relevance to the centers used in earlier EMRs.

CGIAR Secretariat
May 1988
APPENDIX 4.1 LIST OF ISSUES
ICARDA EXTERNAL MANAGEMENT REVIEW

A. Overall Organizational Performance

1. Has ICARDA responded adequately to the recommendations of the First External Management Review held in 1984?

2. The External Program Review Panel will be studying ICARDA's actual program performance. Over the years has ICARDA been able to build an institutional and managerial infrastructure conducive to good program performance?

3. How satisfied are staff at all levels with their jobs? Is the turnover rate excessive for any category of staff? How are communication, trust, morale and cooperation perceived within ICARDA?

4. What is the attitude of the center Board and management towards change? What means does ICARDA employ to continuously examine its own management effectiveness, in the light of changing circumstances, and introduce corrective action?

B. Organizational Culture

1. What are the main features of ICARDA's current organizational culture? What principal guiding values/philosophies appear to shape the actions of the Board, the management and staff?

2. In what ways does the current ICARDA culture reinforce/deter good institutional performance and innovativeness and creativity in research?

3. How well does the current ICARDA culture fit ICARDA's planned strategy and organizational structure?

4. As this is a relatively new area studied by the EMRs, what methodological lessons can be drawn from the EMR panel's experience in examining the organizational culture of ICARDA?

C. Governance

1. How well has the ICARDA Board carried out its policy formulation, review and oversight responsibilities since the last EMR?

2. What factors have affected (positively and negatively) the Board's overall performance?

3. Are the respective responsibilities of the Board and management clearly understood? Is the demarcation of responsibilities conducive to overall Board and center performance? What has been the quality of the relationship between the Board and management?
4. How well has the Board managed its own internal affairs (composition, selection of members, leadership and management, committee structure, procedures, evaluation of performance etc.)?

5. How well has the Board managed the transition in ICARDA's top leadership?

D. Leadership

1. How well has ICARDA been led since the last EMR?

2. How well do the senior managers work as a team?

3. How should the management tier immediately below the director general be organized?

E. Management of Resources

a. Human Resources

1. Has ICARDA been able to attract and retain international and local staff of the highest calibre? Are the motivation and incentive systems appropriate?

2. What policies and practices govern the length of tenure of senior staff? Are these policies appropriate?

3. Is ICARDA's current job classification scheme appropriate? If not, what alternative schemes should be considered?

4. Is there over- or under-staffing for any category of staff? What measures should be taken to prevent over- or under-staffing?

5. Should ICARDA use dollar-based salaries for its local hires? If payment in local currency is to be continued, how can the staff be protected against high inflation?

6. Have personnel policies and procedures (including, recruitment and selection, salaries and benefits, promotion and career development, staff development, and performance planning and review) been laid out clearly for all categories of staff, including staff stationed outside the headquarters? Are they appropriate? Are they effectively enforced?

7. Is the school allowance system used by ICARDA appropriate? What are the alternatives that can be considered?

8. How are grievances handled? Is the current mechanism for staff consultation appropriate?

9. How well is the human resource management function managed? Are the staffing and organization of the personnel unit appropriate?
b. Finance

1. How successful has ICARDA been in securing resources to finance its activities? How stable is ICARDA's funding base?

2. What are the implications of ICARDA's decision to discontinue conversion of foreign exchange to Syrian Pounds in Lebanon for its future financial health?

3. Have special project and restricted core funding led to fragmentation of activities? How limiting are the conditions attached to restricted contributions?

4. How effective are the mechanisms and processes used for financial management of headquarters and field activities, including financial planning, accounting, budgeting, internal and external auditing, financial analysis and reporting, cash and currency management, and control?

5. How strongly is financial management linked with program management? How much financial responsibility do the scientists have?

6. What priority should ICARDA assign to the installation of a cost accounting system?

7. What criteria should ICARDA use in reviewing the performance of its external auditors and in selecting new auditors?

8. Is a good financial control system in place? How can it be improved?

9. Does ICARDA need an internal auditor? What priority should be placed on establishing such a post?

10. How well is the financial management function managed at ICARDA? Are the staffing and organization appropriate?

c. Administration

1. How successful has ICARDA been in establishing an administrative infrastructure that meets the needs of staff in an efficient and effective manner?

2. How effective are the systems and policies used for managing:

   - procurement operations (foreign and local purchasing, receiving, stores);

   - general services (security, housing and dormitories, food services, transport, travel services);
3. With respect to 2 above:

(i) Organizationally, where should purchasing and supply operations be placed within the administration and finance complexes?

(ii) Are the present policies for private vehicle purchases appropriate?

(iii) Are the policies for disposal of vehicles and other property adequate? How can they be better enforced?

(iv) How effectively does ICARDA manage the International School? What can be done to improve efficiency?

(v) Is there need for having a travel agent stationed at ICARDA headquarters in Tel Hadya?

(vi) Are ICARDA's interests protected adequately in the recent arrangements made for procuring cleaning services?

4. How well are the administrative services managed? Are the staffing and organization appropriate?

d. Information

1. Are communication services, including mail handling, telephone, telex and courier service, adequate to serve the needs of the center and staff? Are they managed well? What are the management efficiency implications of ICARDA's inability to participate in CGNET?

2. Do the computers and computer-related services at ICARDA meet the needs of scientific and administrative staff? How effectively and efficiently are these services managed? Are the information management systems appropriate?

3. Are the documentation and the back-up staff in the computer operations area adequate to meet future needs of ICARDA?

4. How well are ICARDA's publication and distribution activities managed? Are these activities carried out in a cost-effective manner?

5. How effectively does ICARDA's library meet the needs of its target groups? How well is it managed? Are the library information systems and practices compatible with international standards?

6. Does ICARDA have a center-wide records management program for all paper files, publications and computerized data? How well are vital records kept for long-term preservation?
F. Program Planning and Management
   a. Planning and Review
      1. How effective is the strategic planning process used by ICARDA? What lessons can be drawn for other centers conducting strategic planning?
      2. How effective is short-term (annual) planning? How well is program planning linked with budgeting?
      3. What monitoring and review systems are in place? Are these effective?
   b. Organizational Structure
      1. What pattern of internal organizational structure exists on paper? What is the perceived pattern? What are the reporting relationships? What coordination mechanisms are used? What are the advantages and the disadvantages of the present structural arrangement? Does it, for example, enable ICARDA to have an effective dialogue with the National Agricultural Research Systems in its region?
      2. What alternative structures could serve ICARDA well in the future in the light of ICARDA's program strategy, its organizational culture and the requirements of the new CGIAR resource allocation system?
   c. Management of Program Activities
      1. What generalizations can be made about the management effectiveness of individual program departments/units and the needs for improvement? (The panel is not expected to conduct a management audit of each organizational unit, other than the resource management units covered above. The question is directed towards management strengths and weaknesses shared by many units in the center.)
G. Relationships with the External Environment
   1. How good is the fit between ICARDA as an organization and its external environment (clients, collaborators, donors)? How successfully has ICARDA managed its relationships with the external environment? Has ICARDA been able to take advantage of the opportunities offered by the environment and minimize the adverse effects on the institution of external constraints? What measures can be taken by the CGIAR community (donors, other centers, TAC, CGIAR Secretariat) to minimize the adverse effects of constraints imposed by them?
   2. What are the likely effects on improving inter-center relationships of the recent CIMMYT board decision aimed at redefining relationships with ICARDA?
3. How good are ICARDA's relationships with the Syrian Government and the institutions it collaborates with in Syria? How good are its relations with other collaborating countries and institutions?

4. How effective are ICARDA's public relations activities? Are the resources devoted to public relations adequate or excessive?

CGIAR Secretariat
May 1988
APPENDIX 5. CONDUCT OF THE REVIEW

The members of the EMR panel were periodically involved in panel work from late 1987 until mid-June 1988. The first full panel meetings, attended also by Selcuk Ozgediz of the CGIAR Secretariat, were held at ICARDA during January 18-23 1988. At that time the panel included Dogan Sindiren but not Miles Wedeman. Discussions were held with ICARDA’s management, staff and Board members, and we met with the EPR panel. The panel also attended a meeting of the Board's Program Committee and a Board meeting.

During February 18-23 1988 John Dillon traveled to Morocco and Sudan with the EPR to visit ICARDA cooperative projects. Jacob Hautaluoma made a similar trip to Pakistan and Turkey during March 22-29 1988. Around these trips, additional personal and phone interviews were conducted with consultants to ICARDA who had recently investigated aspects of the center's management.

Dogan Sindiren was to attend the Board's Executive Committee meeting in Istanbul in mid-April 1988. This did not occur as, tragically, he died in early April. In late April 1988, Miles Wedeman was appointed to fill the vacant spot on the panel, and Ahmed Thabit of the World Bank - previously Financial Controller at ILCA - was assigned as a resource person to assist the panel on financial aspects. May 16-18 1988 John Dillon attended the CGIAR mid-term meeting to seek donors' views on ICARDA.

The more formal review process was conducted at ICARDA headquarters May 20 to June 10 1988, Ahmed Thabit being present May 20-29 and Selcuk Ozgediz June 3-10.

During its work, the panel had discussions with Board members, donor representatives, present and ex-consultants to ICARDA, management and other staff at ICARDA headquarters, outposted staff and related host-country government officials, ex-trainees of ICARDA, representatives of the Syrian Government, Syrian university officials, EPR panel members and the previous Director General. The interviews with ICARDA staff involved management, scientists and support staff.
John L. Dillon, an Australian, has been associated with the CGIAR system since chairing the Farming Systems Stripe Review in 1976. He was a member of CIAT’s and IITA’s first quinquennial reviews and led CIMMYT’s second review. Professor Dillon has been a member of CIAT’s Board and Chairperson of ICRISAT’s Board. Currently he is a member of the Boards of ILCA and ISNAR, Chairman of the Board of Management of the Australian Centre for International Agricultural Research (ACIAR) and President of ACIAR’s Policy Advisory Council. He is Professor of Farm Management at the University of New England, a past-President of the Australian Agricultural Economics Society, a Fellow of the American Agricultural Economics Association, a Fellow of the Australian Institute of Agricultural Science, and a Fellow of the Academy of the Social Sciences in Australia. Dillon completed his B.Sc. Agr. at the University of Sydney in 1952 and his Ph.D. at Iowa State University in 1959.

Jack E. Hautaluoma is Associate Dean, College of Natural Sciences, and Professor of Industrial Organizational Psychology at Colorado State University. He has worked on international development projects since 1967 for the U.S. Peace Corps and USAID. For most of the last two years, he was on loan to the U.S. National Science Foundation’s Office of International Programs. Hautaluoma has extensive experience as a management consultant specializing in inter-disciplinary inter-cultural team development, conflict resolution, and planning and goal-setting. Among his clients are agricultural and ecological research organizations. Earlier in his career he was an industrial engineer for U.S. Steel. He earned his B.A. in 1955 at the University of Minnesota, Duluth, and his Ph.D. in Social Psychology at the University of Colorado in 1967. He was a post-doctoral fellow at Yale University in Administrative Sciences.

M. Dogan Sindiren was Acting Director of Administration and Finance at the West Africa Rice Development Association (WARDA) in Cote d’Ivoire. At the time of his death on April 6, 1988 he was in Ankara, en route to Istanbul to attend the meeting of the ICARDA Board’s Executive Committee. Previously, Dr. Sindiren had served as Interim Director of Budget and Finance at the International Institute of Tropical Agriculture (IITA) in Ibadan, Nigeria, and as a member of the panel which conducted the CGIAR Interim External Review of WARDA in 1986. A Turkish national, Dr. Sindiren had a Ph.D. in finance from Michigan State University (1970) and was professor of finance and business policy at Gazi University in Ankara from 1964 until his retirement in 1985. He had served as consultant to numerous organizations in Turkey and abroad and is the author of several books and articles on finance and business policy.
Miles G. Wedeman is a graduate of Swarthmore College and the Harvard Law School and admitted to the Bars of the Commonwealth of Massachusetts and the District of Columbia in the United States. For many years Mr. Wedeman was with the U.S. Agency for International Development, his last post being Director of USAID, Damascus, Syria. Between 1981 and 1985 he was Principal Administrator, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT).