

INTERNATIONAL MONETARY FUND

Minutes of Executive Board Meeting 90/172

3:00 p.m., December 12, 1990

M. Camdessus, Chairman
R. D. Erb, Deputy Managing Director

Executive Directors

Alternate Executive Directors

M. Al-Jasser

C. S. Clark

M. Fogelholm

J. E. Ismael

J.-P. Landau

C. V. Santos

A. Végh

L. E. N. Fernando

G. C. Noonan

Zhang Z.

M. E. Hansen, Temporary

H. S. Binay, Temporary

G. H. Spencer

N. Kyriazidis

M. A. Ahmed, Temporary

H.-J. Scheid, Temporary

T. Sirivedhin

F. A. Quirós, Temporary

J.-F. Cirelli

M. A. Ghavam, Temporary

L. J. Mwananshiku

P. Wright

G. P. J. Hogeweg

R. Marino

A. G. Zoccali

M. Nakagawa, Temporary

L. Van Houtven, Secretary and Counsellor

S. W. Tenney, Assistant

Also Present

IBRD: J. J. Warford, A. C. Williams, Policy, Research and External Affairs. Asian Department: J. Schulz. Exchange and Trade Relations Department: T. Leddy, Deputy Director; A. López-Claros. External Relations Department: R. W. Russell, J. Starrels. Fiscal Affairs Department: V. Tanzi, Director; K.-Y. Chu, K. M. Miranda, P. M. Nagy, K. Nashashibi, P. Shome. Legal Department: W. E. Holder, Deputy General Counsel; D. Asiedu-Akrofi. Research Department: N. M. Kaibni. Secretary's Department: J. W. Lang, Jr., Deputy Secretary; A. Tahari. Bureau of Statistics: B. Gürgen. Personal Assistant to the Managing Director: B. P. A. Andrews. Advisors to Executive Directors: Z. Iqbal, J. M. Jones, S.-W. Kwon, J.-L. Menda. Assistants to Executive Directors: B. Abdullah, C. Björklund, S. K. Fayyad, B. R. Fuleihan, M. A. Hammoudi, O. A. Himani, M. E. F. Jones, P. K. Kafle, K. Kpetigo, M. Mrakovcic, L. Rodriguez, J.-P. Schoder, N. Sulaiman, S. von Stenglin.

1. THE FUND AND ENVIRONMENTAL ISSUES

The Executive Directors considered a staff paper on the Fund and environmental issues (SM/90/219, 11/16/90).

Mr. Scheid, speaking for Mr. Goos, made the following statement:

On the issues for discussion, I can broadly endorse the approach for Fund involvement proposed in Section V of SM/90/219. The protection of the environment is indeed too important an issue to be ignored by the Fund, all the more so because of the existing linkages between environmental concerns and macroeconomic and structural policies. Yet, for the reasons mentioned by the staff, in particular the monetary character of the Fund and its main responsibility to promote viable balance of payments positions, we feel that there is only a very limited role the Fund could usefully play in this area. In any case, the explicit recognition by the Fund of environmental concerns must not compromise the soundness of its macroeconomic and structural policy advice. Accordingly, solutions to environmental issues should be found within the framework dictated by domestic and external financial stability concerns and they must not be allowed to delay the restoration of external payments viability. Given these constraints, the appropriate realm for dealing with environmental problems, therefore, lies quite obviously in the microeconomic policy area-- an area where the Fund has little responsibilities and expertise.

We strongly feel that the Fund should not develop its own environmental capacity nor should the Fund staff play an active role in the assessment or evaluation of the possible implications of specific policy measures for the environment. Since the Fund would get involved only in environmental issues based on convincing and obvious evidence, as rightly proposed in the staff paper, the relevant information should normally be readily available from other multilateral organizations. This information as well as related assessments and evaluations should be integrated as a given into the Fund's macroeconomic policy advice, provided, of course, this would not interfere with the principles of Fund conditionality, including the extent and duration of the Fund's financial assistance.

Such an approach would not entail obvious implications for the Fund's resources. It could be pursued in the framework of the already existing working relationships with the staffs of other multilateral institutions, notably the World Bank; and if necessary, it should be possible to strengthen those relationships in the area of environmental concerns.

While, in its operational work, the Fund should be sensitive to environmental issues, the development of an independent Fund capacity for environmental analysis and advice would be inappropriate. It could also give rise to an expansion of the Fund's operational work into other areas alien to its primary responsibilities. Incidentally, this would become clear if all the references to the environment in the staff paper were replaced with references to, say, health or education. Those areas are no less relevant to macroeconomic concerns or to growth than the environment. Accordingly, the reasoning in the staff paper could also be used to justify the integration of health and educational concerns into the Fund's operations and to increase the level of staffing for such purposes.

Two other issues should be addressed. First, the repeated formulations in the staff paper suggesting that, in the context of the Fund, promotion of growth would command the same, if not a higher priority than external payments viability are a cause for concern. Similarly, the presentation contained in paragraph 1 on page 20 of SM/90/219 on the promotion of sustained growth as one of the Fund's primary responsibilities is difficult to reconcile with the purposes of the Fund stipulated in Article I (i) and (ii) of the Articles of Agreement, where the promotion of growth is mentioned only as a secondary or derivative objective to be achieved as a result of the promotion of monetary cooperation and international trade.

Second, our confidence that the Fund in dealing with environmental concerns could rely on the cooperation with other organizations was substantially shaken by the statement, contained in the last paragraph on page 4 of the staff paper, that "...exchange rate policy is the most appropriate instrument for achieving macroeconomic and external objectives..." This statement is of course not in keeping with the conclusions of the recent Board Seminar on the analytical aspects of exchange rate policy (EBS/90/7 and EBS/90/8, 11/21/90), betraying a considerable lack of cooperation within this institution. Nevertheless, I remain hopeful that with appropriate efforts by all the parties involved, such weaknesses in cooperation could be overcome both within this institution and, if needed, in relation to other organizations.

Ms. Hansen made the following statement:

As members of the Board are aware, there is a great interest in my country in the quality of the environment and, as the staff paper notes, this high level of public concern is reflected in recent U.S. legislation of concern to the Fund.

The staff paper currently under consideration eventually arrives at some constructive suggestions, but not without first erecting more obstacles to Fund involvement in this area than actually exist.

Determining the appropriate role for the Fund in environmental matters involves three central issues. First, Fund policy advice has an impact on the environment. Second, in the light of that, the Fund should be concerned about the consequences of its advice. Third, it would be feasible for the Fund to take environmental concerns into account in formulating its advice to members.

While Fund policy advice does not have an appreciable impact on the environment in every case, as the staff paper notes, there are a number of examples where Fund policy prescriptions could affect the environment adversely, such as expenditure cuts that affect environment protection services or exchange rate changes that may accelerate to an undesirable degree the depletion of natural resources, to name but two examples.

The corollary, of course, is that Fund advice could also have a positive effect on the quality of the environment, if it led, for example, to greater attention being paid to the mix of public expenditure cuts and to the kinds of taxes that are used to generate new revenues. Although not environmentally motivated, the Fund's encouragement to many members to passthrough higher world oil prices to domestic consumers is an example of the positive effect Fund advice can have on the environment.

As to whether it is appropriate for the Fund to be concerned about these issues, one of the great strengths of the Fund's Articles is that they are sufficiently broad to encompass the evolving needs of member states. Clearly, the Fund's founders did not anticipate the need to take environmental issues into account, but then they did not envision how important these issues would become for medium- and long-term economic stability.

On numerous occasions, the Board has discussed the critical importance of countries' progress toward medium-term viability in assessing the appropriateness of Fund support for members' adjustment programs. However, it is difficult to envision how a country could be making such progress if, for example, its policies lead to the steady de-certification of the countryside and increased import dependence, or, if the exploitation of its mineral resources is carried out with such disregard for the environment that the ensuing domestic upheaval causes a sudden reduction in exports, a curtailment of foreign capital inflows, and a deterioration in the balance of payments.

The Fund's mandate chiefly concerns short-term balance of payments stability, while the World Bank and other development banks are often looked to for a longer-term perspective. However, it would be absurd if, in some cases, the Fund's inability to look beyond the short term meant that members' prospects for medium-term viability were compromised, or if the Fund unwittingly undermined in the short term what sister institutions were seeking to achieve over the medium term. The point is that the Fund needs to be aware of the consequences of its activities and to contribute, insofar as it is able, to the solution of environmental problems, or at a minimum, avoid aggravating them.

As to the feasibility of Fund involvement in environmental issues, we agree with the proposition that the Fund is not the best-placed institution to undertake in-depth, ground-breaking analyses of members' environmental problems and the optimal solutions to them. However, the Fund has better tools for addressing environmental issues and faces fewer obstacles to using them effectively than is commonly recognized.

First, the staff paper describes the market failures that lead to environmental problems and the usefulness of fiscal measures in correcting these failures. The Fund has a strong mandate in fiscal policy, and is deeply involved in getting members to cut expenditure and raise revenues. If the will were there to consider the environmental impact of its advice to member governments, the Fund could contribute to the solution of these environmental problems by paying more attention to the mix of expenditure cuts and the types of taxes that are employed to reach its deficit-reduction targets.

Second, the Fund could strengthen its collaboration with the World Bank on issues of expenditure mix and the incentive effects of various forms of taxation. The policy framework paper (PFP) process provides one formal vehicle for Bank/Fund collaboration on these issues for countries eligible to use the structural adjustment facility (SAF) and the enhanced structural adjustment facility (ESAF). However, the effectiveness of the roles of the World Bank and the Fund in fiscal policy in general, and the environmental impact of Fund policy in particular, could be enhanced through a more systematic exchange of views, or a meeting of minds, on the incentives and disincentives established through fiscal policy.

Third, the staff paper points to a number of perceived obstacles to greater Fund involvement in environmental issues, including the lack of perfect information where environmental issues are concerned, the impossibility of generalizing about policy responses that meet both macroeconomic stabilization and

environmental needs, and the likelihood that irreconcilable conflicts would arise, and the need to proceed on a case-by-case basis. While these are clearly complicating factors, they are not problems that the Fund is unaccustomed to dealing with on a regular basis.

I detected some hesitation on the part of the staff concerning the Fund's inability to judge the optimal level of taxation needed to discourage an environmentally undesirable activity. While the Fund probably would not claim perfect knowledge about the correct amount of currency devaluation, in most cases, it does not refrain from recommending exchange rate adjustment when common sense indicates that a currency is grossly overvalued. The same could be said for when the Fund picks a level for a fixed exchange rate. In most cases, the Fund does not need to be particularly shy about taking sides in policy conflicts or being unable to customize its advice to fit the circumstances of individual members. For better or worse, all of these complications have been part of the Fund's normal activities for some time.

Questions have also been raised concerning the extent to which the Fund should involve itself in microeconomic issues. It is difficult to say with any precision at which point tax policy ceases to be a macroeconomic policy tool, and becomes a microeconomic policy tool. While it could be argued that energy tax policy is a microeconomic concern, the Fund has ventured into these waters by requiring countries to provide a letter outlining their energy policy intentions in order to qualify for Fund assistance under the modified compensatory and contingency financing facility (CCFF).

The staff paper also questions the possibility of integrating environmental considerations into Fund conditionality. The possibility should not be ruled out in cases where environmental problems are severe and would have an impact on such central Fund concerns as medium-term viability. Indeed, the Fund's energy policy requirements in connection with the CCFF, although not intentionally environmentally motivated, come very close to integrating environment-related considerations into Fund conditionality.

The importance and the feasibility of taking into account the environmental impact of the Fund's policy advice had led my authorities to the conclusion that the Fund should establish a small environmental unit. Its purpose would be to assist desk economists in carrying out the tasks identified in paragraphs 2(a) and 2(b) of the issues for discussion contained in SM/90/219 and to ensure that these new tasks would be carried out in a systematic, consistent way throughout the Fund. As the Fund should not operate in a vacuum, this unit should make an effort to keep

abreast of the activities of other institutions involved in this domain and ensure that Fund activities do not conflict with theirs.

The Fund could also play a constructive, albeit limited, role in transnational and global environmental issues. The staff paper has mentioned a Fund role in facilitating debt-for-nature swaps and participating in international conferences, which we would welcome. However, we believe the Fund should also give the same regard for the implications of its policy advice for transnational and global environmental problems as it would for strictly domestic problems.

I support the Fund's role in helping to develop national income accounting statistics that reflect natural resource use, and we urge the staff to continue this work.

In conclusion, the Fund can play an effective role in responding to environmental concerns, consistent with its mandate and purposes. We look forward to the establishment of an environmental unit as a tangible expression of the Fund's will to incorporate environmental concerns into its activities.

Mr. Ismael made the following statement:

At the outset, let me state that we fully share the concern for the environment expressed by other Directors. Both developing and industrial countries are contributing to aggravating the burden on the environment. In developing countries, poverty and lack of development are major causes of environmental degradation; where development is not lacking, but is not properly prepared and implemented, it can equally damage the environment. In industrial countries, the established pattern of production and consumption consumes most of the world's metal and fossil fuels and resource intensive products, contributes most of the pollutants--such as carbon dioxide, chlorofluorocarbons, methane and other greenhouse gases--and sources of environmental degradation--such as harmful liquids and solid waste.

Environmental degradation, besides having a negative effect on welfare, can have a detrimental effect on production and growth, if not now, then for the future generation. It is within the mandate of the Fund to "contribute to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members...." Therefore, it would not be appropriate for the Fund to ignore a portion of a member's economy, that has an impact on the sustainability of growth in the long run.

Nevertheless, taking into consideration the Fund's mandate, its resource limitations, and the expertise of other institutions, its involvement in environmental issues should be somewhat limited.

The Fund has generally limited its involvement to macro-economic issues, as is appropriate. However, as the staff paper points out, Fund-supported policies can have environmental consequences, perhaps indirectly, depending on the structural features of the economy in question and the effect of macroeconomic policies on the composition of macroeconomic aggregates. This is particularly true in the case of taxes, subsidies, and environment-related expenditures, but even exchange rate policy or monetary policy can have environmental impacts. The Fund should take these effects into account when considering its policy advice. Nevertheless, the staff has correctly cautioned that the Fund should not be perceived as intruding into a country's internal microeconomic policies or as adding another objective to its agenda. The specific microeconomic aspect of environmental issues should be left to the World Bank and other institutions that have greater expertise and a more direct mandate in the matter. It goes without saying that non-economic policy measures, such as natural resource management in general or conservation projects, do not come within the Fund's purview.

Article IV consultations are the most appropriate vehicle for Fund involvement. This will ensure an evenhanded treatment for all members. Moreover, some environmental problems may extend to several countries, so that treatment in the context of Fund surveillance would be appropriate. Within the context of Fund-supported programs, the environmental impact of macroeconomic policy measures should not be ignored, and the staff should be free to give their views, or bring it to the attention of members. Trade-offs should be discussed. We strongly believe, however, that environmentally related policies should not be introduced as a conditionality. Fund programs should, as usual, concentrate on the short and medium terms.

In this connection, we can go along with the approach suggested by the staff and summarized in paragraph 2(a) of Section VI of the staff paper. We might even reluctantly go along with paragraph 2(b). We would not, at the present stage, favor a more active approach, or one that would require elaborate revisions of the national accounting framework. The present framework should be sufficient to enable the staff to gauge the direction of environmental effects. Once additional data becomes available from the

work of the United Nations and/or the World Bank to enable measurement of the size of the environmental effects, the Fund could review its methodology.

We have reservations concerning the suggestion for international coordination of environmental policies. On balance, we would prefer that the Fund not become involved in this aspect for the time being. First, the question of national sovereignty is of concern. Second, it may be difficult to remain evenhanded.

Finally, we agree that it would be useful for Fund staff to maintain contacts with the World Bank and other organizations that have a comparative advantage in this area, without a need to set up a special unit for this purpose as proposed by Ms. Hansen. A functional approach rather than an institutional approach should be pursued and this should minimize the need to increase staffing requirements.

Mr. Wright made the following statement:

In the long run, there may be no real trade-off between economic and environmental objectives. Growth and external viability are unlikely to prove sustainable where they entail serious environmental degradation and this should be taken into account in formulating economic policy.

This does not mean, however, that environmental preoccupations should deflect governments from the pursuit of sound conventional economic policies. It is likely to prove more feasible to address environmental issues constructively in an economy that is already enjoying reasonable growth than in one that is stifled by overregulation. There is no need for conflict between broad adherence to free-market principles and concern for the environment. The price mechanism provides powerful signals to policy-makers as well as a means for addressing externalities. Indeed, some of the worst cases of environmental decay are being uncovered in Eastern Europe, where market mechanisms have failed on a massive scale.

Over the shorter term--the period in which the Fund normally operates--there may be genuine dilemmas between economic and environmental objectives, as the staff paper illustrates. The nature of the dilemma may also differ as to whether a country's policies are being examined in the context of an Article IV consultation or an adjustment program. In the latter case, there is a necessary concern with the country's capacity to repay the Fund within five

years or so, and it is possible to imagine circumstances in which the policies consistent with this objective may not be optimal over a longer-term horizon.

When formulating policies to be adopted under Fund-monitored programs, the staff clearly needs to be mindful of any adverse environmental consequences of such policies. However, I do not think that the staff could or should go any further than this. As the staff paper makes clear, the links between macroeconomic policies and their consequences for the environment are far from being self-evident. It is often impossible to make definitive judgments about environmental issues without recourse to a body of expertise in diverse disciplines, which the Fund currently lacks, and to data, to which it does not have ready access. There is no case for the Fund's seeking to develop expertise in this field, either by taking on more resources or diverting existing ones. In addition, there is no case for altering the Fund's role in the way that would be necessary if it were to consider environmental matters on a more systematic basis. In short, the Fund does not have a leading role to play in environmental issues. Where there is convincing and obvious evidence that such issues need to be addressed in the context of the Fund's advice, reference should be made to other institutions, notably the World Bank, which has some comparative advantage in this area.

With respect to the proposals contained in the staff paper, I have no difficulty with those outlined in paragraph 2(a) of Section VI. I would mention in particular energy pricing as an area in which taxes and subsidies clearly have important environmental implications. As to paragraph 2(b), I would prefer an alternative formulation that would state:

"The Fund, in formulating its macroeconomic and structural advice in support of its traditional objectives, will be mindful of the environmental implications of these objectives. If convincing and obvious evidence were presented of major adverse environmental implications of the Fund's advice, this would be taken into account on a selective basis and reference would be made, if necessary, to institutions with greater competence in this area. The Fund's macroeconomic and structural objectives would not be compromised as a result of this process, however."

Mr. Binay made the following statement:

Although the staff paper discusses objectively the Fund's involvement with environmental issues, it fails to allude to

the effects of relative pricing mechanisms in the international markets. To broaden the scope of issues for discussion, let me review the staff's arguments concerning the major causes of environmental degradation.

As a first cause of environmental degradation, the staff paper identifies market failures. However, it fails to follow up by identifying which--or whose--markets are failing in their function of balancing the marginal social costs and marginal private costs of environmentally hazardous activities. The scope of the staff's examination is limited to the domestic markets of developing countries, but in the light of the current status of global trade, hampered as it is by heavy tariffs, nontariff barriers, and subsidies, I wonder whether an assessment limited in this way could be very realistic. When a country seeking to achieve a viable balance of payments situation finds that its access to export markets is limited by quotas and other forms of trade barriers for environmentally neutral or environmentally less hazardous products but wide open for other products, who is deciding its export product mix and production technologies? In addition, along the lines of the staff's analysis, which market is effectively assessing the marginal social costs?

As a second cause of environmental degradation, the staff paper correctly demonstrates that there is a link between government policy and the market's failure in the form of the subsidization of certain activities, but does not elaborate on the global impact of the negative externalities flowing from these subsidies. For example, when a market maker, or a group of countries with a substantial share in the market, subsidize a given commodity or group of commodities, and smaller, less powerful participants in the market are enjoined to avoid using subsidies to promote their production, but, instead to passively observe the prices induced by the market makers, what is the impact of the distortion on the smaller participants? Do they have the resources, manpower, exporting opportunity, and technological ability to withdraw from that sector and switch to others? If they cannot make such changes, and must continue to face incomes artificially lowered by the subsidized prices of others and the pressures of an unemployed or underemployed population, how could they be expected to take enough time away from these worrisome problems to raise their consciousness about the environment?

As to the link between environmental degradation and poverty, the first question that arises is whether poverty is simply a matter of natural resources, or is the social structure an important factor? Although the briefest consideration of history should suffice to demonstrate the importance of social structure, and although the alleviation of poverty is a primary medium-term

objective of many economic programs, it seems that reducing incompatibilities between an existing social structure and the goal of poverty alleviation has seldom, if ever, been considered. It is customary, instead, to accept the status quo as a given, and to let the goal of poverty reduction depend on "trickle down" and other mechanisms that leave existing social structures unmodified. In our recommendations to many countries, especially in the area of fiscal policy, we wonder whether the Fund could identify elements that could be inserted for the specific purpose of improving social structures to enable them to cope better with the problems of poverty and environmental degradation.

I differ with the staff on the classification of the environment. The main issue, in this respect, is whether the environment should be considered a public good, the benefits of whose preservation are equally shared and the costs of whose preservation are to be distributed according to affordability, like national defense? Will our views concerning the social marginal costs and private marginal costs of the environment differ from those of our children? Should we wait until the ongoing destruction of the environment affects all of our children equally and indiscriminately, before declaring that the environment was an international public good all along?

Until we have some empirical evidence about the environmental effects of protectionism and subsidies, the time will not be ripe to make conclusive decisions about the nature of the Fund's involvement in environmental issues. However, the production of such a study should pose little problem for an organization whose primary responsibility is to promote an open trade and payments system and which is equipped with surveillance functions to help it achieve that goal.

Mr. Végh said that, although his chair considered environmental degradation an important issue, he agreed with the skepticism expressed by the staff concerning a more explicit role for the Fund in that area.

Section V of SM/90/219 underscored the general difficulty of the task and, in that connection, he agreed with thrust of Mr. Goos's comments that the Fund should neither develop its own environmental assessment capacity nor play an active role in the evaluation of possible policy implications for the environment, Mr. Végh continued.

In fact, given that the relationship between macroeconomic policy advice and the environment was typically indirect, ambiguous, and in some specific circumstances even questionable, the Fund should incorporate such concerns only in the presence of incontrovertible evidence that

macroeconomic policies under its purview were seriously compromising its objectives, which were clearly spelled out in the Articles of Agreement, Mr. Végh added.

In the light of those considerations, Mr. Végh concluded, it should be left to the authorities concerned to request Fund involvement regarding alternative policy mixes that would address environmental concerns arising from demonstrated distortions in resource allocation.

Mr. Clark made the following statement:

In a world where environmental concerns are increasingly linked to economic growth and development issues, the Fund cannot ignore them. In that sense, we appreciate the effort made by the staff in trying to identify potential areas of involvement by the Fund in environmental matters.

In considering this issue, however, there is a need to remain mindful of the Fund's role. We agree with the staff that, as environmental degradation often reflects inappropriate pricing and market failures on a microeconomic scale, while Fund-supported policies are typically macroeconomic in nature, the Fund's environmental role will, at least at the start, have to be modest. Furthermore, it is clear that the Fund does not have a comparative advantage in environmental issues. As a consequence, to avoid unnecessary duplication, it would be preferable if the lead in addressing environmental issues was taken by other agencies, possibly the World Bank, which have the required expertise.

I will focus my comments on the issues for discussion outlined in the staff paper. The answer to the first question, concerning whether the Fund should incorporate environmental concerns more explicitly in its policy advice, is quite clearly yes. The Fund can no longer stand aloof from such issues. At the very least, it is incumbent upon the Fund to be in a position to respond to criticism directed at it from environmentalists.

The second question, relating to the kind of involvement the Fund should have on environmental matters, is the real issue to be considered. The staff paper raises concerns about the appropriateness of getting involved, and the difficulties of doing so if it is decided to pursue environmental interests. We agree with these concerns, and we agree with the staff that the most appropriate way for the Fund to deal with environmental matters would be through its surveillance operations. For example, environmental issues could be added to the standard list of questions with regard to the Article IV consultations. In its role as surveillance and policy advisor, the Fund could certainly

incorporate environmental matters through paying particular attention to tax and subsidy policies that affect the environment.

An important and related issue is whether the Fund would be able in any meaningful way to impact through its surveillance mechanism on environmental degradation in industrial countries. Unfortunately, the answer to that question is probably no. The Fund's major impact would be on developing countries, particularly those having Fund-supported programs, and which, from the outset, may face equally complex choices as industrial countries, but which also have far less alternatives for income generation. The Fund would want to guard against being perceived as less than evenhanded.

Adding environmental matters to the conditionality for the use of Fund resources, would in general go beyond the mandate of the Fund. The World Bank should lead the dialogue with members on environmental issues. Where appropriate, the Fund should ensure that specific structural reforms supported by Fund resources are fully consistent with the Bank's guidance on the environmental impact of such reforms.

Question 2b of the issues for discussion suggests that the Fund take into account environmental implications when formulating macroeconomic and structural advice, and that it contemplate alternative policies when the "evidence is obvious and convincing". We agree with this conclusion, but a careful approach must be taken in that respect. Perhaps this should be tried on an experimental basis. The staff could identify a few cases where the Fund could play a meaningful role in the promotion of a better environment. The Board could review the experience on a case-by-case basis at some future date--perhaps in 12 to 18 months.

As to the question, raised under item 3, on whether the Fund should get involved in international and global environmental issues, once again, the Fund must be careful about getting involved in an area where it does not have the expertise, and where other international institutions clearly have the lead. Any Fund involvement on transnational issues should be on a very selective basis, where it has a clear role to play.

As to the final question concerning resources to be used within the Fund to incorporate environmental matters, unlike Mr. Wright, and, Mr. Ismael, I could support a reallocation of Fund resources. As Ms. Hansen suggests, perhaps a mini-unit, consisting of two or three environmental experts, could be formed. Staff from all divisions of the Fund could draw in large measure on the expertise of that small group when they need it. This

group would, in turn, draw on work prepared by the World Bank, which is already in the process of developing expertise on environmental matters.

Mr. Al-Jasser made the following statement:

Protection of the global environment and control of pollution are clearly noble objectives, and no one opposes them. However, a question arises as to the role of the Fund in this endeavor. After evaluating all the arguments put forth by the staff, I have come to the conclusion that the Fund should not be involved. However, we should continue to provide strong moral support to other, more competent, agencies to attend to environmental issues.

As the staff paper acknowledges, the Fund's primary responsibilities are to promote international monetary cooperation, an open-trade and payments system, and sustained economic growth. These objectives have been addressed through the advocacy of appropriate macroeconomic and structural policies. Inclusion of protection of the environment as an additional objective would stretch our mandate beyond what I consider to be appropriate.

Even assuming that the environmental issue has an impact on the effectiveness of macroeconomic policies--a relationship that is rather vague at best--the Fund does not have the expertise to address it. Given the staff constraints and the myriad of other more pressing and relevant responsibilities, the benefits of acquiring additional skills to handle environmental issues would surely be outweighed by costs of foregoing skills of direct relevance to the Fund. The Fund staff is already too thinly stretched out to be assigned yet another responsibility.

There are numerous other agencies that have comparative advantage in handling environmental issues. The World Bank, in my view, has the primary responsibility in this context and is particularly well-suited for this purpose. Therefore, when there are environmental issues of unequivocal importance, such as pollution, deforestation, or loss of top soil due to excessive use, it should be expected that the relevant agencies will have taken the necessary steps to correct them. Whenever a convincing and obvious case arises, the relevant agencies should be expected to have responded. Sound policy advice by the Fund, such as the appropriate pricing of natural resources; is necessary for macroeconomic balance, and may have a beneficial effect on the environment, but Fund advice cannot be guided by such considerations. In principle, prudent macroeconomic advice can only benefit, rather than harm, the environment.

The staff has favored a cautious Fund response in view of possible trade-offs and to honor the authorities' prerogatives. It has been suggested that correction of price distortions, including subsidies on energy, irrigation water, fertilizers, and pesticides, or credit subsidies could be accorded a greater importance in Fund advice, owing to their obvious environmental benefits. However, this can be a double-edged sword and may give rise to yet another type of trade-off. For example, take the case of raising prices of hydrocarbon-based energy in order to discourage pollution. What would happen if the higher cost of this source of energy forced people to substitute firewood for it? This would cause deforestation with the attendant more serious environmental problems, not to mention anything about the impact on the efficiency and growth of the economy. Moreover, unless applied across the board, insistence on higher energy prices for some consuming countries would adversely affect their competitiveness, which would reduce, rather than enhance, a country's ability to handle environmental issues.

Many environmental problems have externalities with costs and benefits. I am not sure that the Fund would be well-advised to get involved in a situation where one country imposes a cost on others through degrading the regional or global environment without a quid pro quo. Similarly, costs incurred by a country on the advice of the Fund to clean up environmental effects caused by some other country's policies would be viewed as iniquitous. In particular, such advice might be viewed as an inappropriate intensification of conditionality, especially with respect to developing countries. These are matters of international dimension that the Fund would be well-advised to stay out of.

For the above-mentioned reasons and many others, there is no compelling justification for the Fund to get directly involved in environmental issues. However, this does not mean that we should not do our part in urging other agencies to ensure the protection of the environment.

Mr. Spencer made the following statement:

This chair certainly agrees with the thrust of the staff paper's conclusion that the Fund has no significant role to play in resolving environmental issues. However, we would perhaps be even more cautious than the staff about the Fund's involvement in environmental issues.

I agree with Mr. Goos that the Fund's main responsibility is to promote external payments viability, and this aim must take

precedence, even if this causes a country's environmental objectives to be compromised in some way.

In attempting to promote economic adjustment via surveillance and conditionality, the Fund's advice must inevitably push up against a range of internal political constraints. Such constraints will reflect various social, cultural, regional, ethnic, and environmental interests, many of which will be conflicting. It is not the job of the Fund to resolve these conflicting interests and it is certainly inappropriate for the Fund to systematically focus on just one component of the social welfare function, ahead of all others.

This is not to say that staff should not raise attention to an environmental issue in a country if it is considered to be of major importance from either an international or domestic perspective. However, when staff do touch on the environment they should be very careful not to give gratuitous advice on issues they know little about. Rather than offering diagnosis, as suggested by a number of Directors, the emphasis should be on referral--to other agencies--with recommendations that environmental impact reports be commissioned on issues that may be of particular environmental concern.

In addition, building up the Fund's expertise on environmental issues would be inconsistent with the approach that I am recommending, namely that the Fund stick to its traditional role and let the environmental experts deal with environmental issues.

The suggestion that staff might take environmental concerns into account when giving advice on the details of taxation policy is cause for concern. In this connection, while the need for caution was expressed in the staff paper, it needs to be emphasized. Externalities may lead to gaps between private and social marginal costs of particular projects or policies, but I doubt that the Fund has a sound basis to prescribe particular resource-related taxes or subsidies that will ensure a reduction of such gaps, leading to an overall welfare improvement. The usual Fund approach is to try and make tax systems more neutral in the hope that distortions will gradually be reduced, and efficiency enhanced, over the long run. A change in this approach, to try and counter environmental externalities via a non-neutral tax system, seems very dangerous.

While I would be more comfortable with the staff offering advice on the assignment and enforcement of property rights, the best option is for staff to stand back and refer environmental issues to agencies that are better positioned to deal with them.

Mr. Landau made the following statement:

The comprehensive and well-balanced staff paper provides realistic background information on the important contemporary issue of environmental preservation. My authorities are fully aware of the importance of the issue, as illustrated by their commitment to the recently created Global Environment Facility. It is clear, indeed, that the Fund should take into consideration environmental concerns, since they are very important for the future.

Before turning to the staff's proposals, the three main reasons that justify, in the present context, a stronger involvement of the Fund in environmental issues and problems should be stressed.

First, by their nature, environmental effects are at the source of strong externalities which could affect the conduct and implementation and effect of economic policies of different nations. On one hand, there could be positive effects associated with specific costs undertaken by nations, but which extend to others, and, on the other hand, national policies for regulations aimed at protecting the environment could lead, voluntarily or not, to a reduction in the freedom of circulation of goods or capital movements. In the light of those two points, a strong surveillance by a multilateral organization, such the Fund, is well justified.

Second, from a macroeconomic perspective, environmental imperatives will lead to an increasing content of capital in production in many sectors. This increase in the capital ratio, in a world where savings are scarce, might have a significant impact on global growth. Therefore, this represents a legitimate concern that merits Fund involvement and study.

Third, the world economic outlook exercise should take a closer look at the way in which the environment influences national policies, external balances and imbalances, and the conditions for economic growth. The environment is a global concern and it should be taken into account in the relation between structural and macroeconomic policies, which are at the heart of the world economic outlook exercise.

I would like to comment on the specific issues raised in the staff paper for discussion.

As to expanding Fund policy advice to include more environmental concerns, a positive answer is justified. Indeed, as the staff points out, this has already been done in many respects

through PFPs, and staff papers pertaining to SAF and ESAF arrangements, as well as extended arrangements. In addition, there is an absolute necessity that the Fund should participate in international conferences on this subject.

The second issue raised for consideration is indeed the most important, as it defines the conditions of Fund involvement. In the framework of both Fund surveillance and conditionality, the present stance should be pursued in promoting policy reforms to strengthen traditional Fund objectives; within this context, more attention could be devoted to tax and subsidies policies that may affect the environment, but on a case-by-case basis. In this respect, the head of Fund missions should have full discretion to assess environmental implications of policies, in relying, if necessary, on specialized advice from other institutions like the World Bank, the OECD, or the UNEP.

Our position is not yet final on the matter of whether incorporating environmental concerns into Fund operations should be done within the present ways and means of the staff's work. In the framework of the Articles of Agreement and their application to the contemporary problems involving the environment, the demand for additional Fund resources can be considered without prejudice.

In conclusion, I strongly support the integration of environmental concerns within the usual work of the Fund, while relying on more specialized external advice, if necessary, but while the Fund properly discharges its multilateral responsibilities in the surveillance of national economic policies in this field as well as in others.

Mr. Fogelholm made the following statement:

There are no easy answers to the question of the extent to which--if at all--the Fund should include environmental issues in its activities. The matter is further complicated by the fact that there is no clear cut relationship--particularly in the short run--between the Fund's macroeconomic policy advice and the environment.

However, in the long run there is an obvious link between sustainable economic growth and a healthy environment. Equally important is the premise that only from a strong and sound economic base can environmental degradation be effectively tackled. The situation in Eastern Europe clearly exemplifies this. Therefore, it stands to reason that also the Fund should stress the importance of environmental issues.

The staff paper analyses succinctly the feasibility and desirability of incorporating environmental aspects into the Fund's work, and the ways and means by which this could be accomplished. In this context, a number of relevant impediments--legal, practical, resource-oriented, and of substance--have been pointed out. It is also clear that one could question whether large-scale engagement by the Fund in environmental issues can be considered compatible with the Fund's mandate, which, of course, is to provide macroeconomic advice and short-term balance of payments support with due regard to the monetary character of the organization.

At the same time, however, it would indeed be counter-productive if the Fund were to completely isolate itself from current widespread concerns about the state of the environment in many countries and from the action in this area that is being taken by other international organizations. The question for the Fund is, then, how to successfully balance these two interests without fundamentally changing its character.

To be brief, this chair can largely concur with the approach suggested in Section V of the staff paper. In particular, we appreciate the emphasis placed on the assessment of price distortions in the economy and on how fiscal measures could be structured to prevent such distortions from having a negative impact on the environment. In this connection, the difficulty relating to the quantification and the inadequacy of the statistical base, in general, has to be taken into account. Moreover, as the primary goal in the long run is to improve the environment rather than maximize revenues, it is important that environmental considerations do not become totally subordinated to those of income generation.

More specifically, we believe that the Fund, within the framework of the Article IV consultations, could explicitly raise environmental issues when the evidence of degradation is obvious and convincing and where the degradation is having distinct detrimental effects on the economy. Thus, there should be a clear connection between environmental degradation on the one hand and macroeconomic balance and growth on the other for the Fund to react. But in cases where there is a policy conflict and trade-offs arise, as described in the staff paper, the Fund should give priority to the area of its responsibility, that of ensuring external viability and macroeconomic balance.

With regard to adjustment programs, it is the view of this chair that the Fund should refrain--for the reasons given by the staff--from incorporating specific environmental issues and policies in the programs. If that were to happen, the Fund's

monetary character could easily be called into question. Consequently, we would completely exclude the possibility of including environmental issues as performance criteria.

With regard to the environmental problems of a more global character, such as those relating to acid rain, the ozone layer, and global warming, to mention a few, we do not see any active role for the Fund. However, it could be contended that environmental issues--to the extent that they distort international competition--have an impact on world trade and this lies, of course, within the Fund's province. Nevertheless, the general rule should be that the Fund relies on the expertise of other international organizations, such as the World Bank, OECD, UNEP, and other UN organizations, which have special skills in the area of environmental preservation.

Finally, we do not believe that the implications of staffing or resource problems owing to increased involvement by the Fund--if this takes place within the Article IV framework--are necessarily as inevitable or as significant as the staff paper suggests. In fact, we do not support an increase in the number of staff for this purpose or the establishment of a specific environmental unit in the Fund. We must manage by using the specialized knowledge provided by other organizations in combination with the growing knowledge of our own staff about the environment.

Mr. Fernando noted that the Fund's role was essentially that of assisting the membership to formulate and implement sustainable policies. Thus, it necessarily had to strike a balance between short-term gains and long-term risks. In that respect, questions concerning the impact of economic policies on the environment, especially where they impinged on finite national resources, or even renewable resources, deserved to be addressed. However, in cases where the aim was to conserve use of resources on grounds of preserving temporary liquidity within national boundaries, say through the reduction of absorption and more efficient use of resources, the Fund should focus sharply on policy variables that had a more transparent effect on future generations, such as the level of national or international reserves and the balance between short-term adjustment goals and long-term obligations. The way in which trade-offs between economic and environmental objectives should be assessed clearly depended on the situation of economic imbalances at a given time and the needed adjustment policies, in particular in cases where the use of Fund resources was associated with stabilization programs and in the context of traditional Fund-monitored programs, such as stand-by arrangements, owing to the need for a quick turnaround in the balance of payments position. Consistent with the revolving character of

Fund resources, the policy options of a member might seek to maximize short-term gains in order to reduce or contain the debt overhang, thereby, constraining policy options in addressing environmental interests.

In the light of those complex and sometimes sensitive considerations, the Fund would need to use caution in giving policy advice related to the environment, Mr. Fernando considered. Wherever possible, the Fund should seek to complement the efforts of other national and international agencies whose mandates included a direct responsibility for the environment.

Initially, the Fund could, within the context of Article IV surveillance, attempt to simulate scenarios based on policy variations that accorded higher priority to environmental concerns, Mr. Fernando continued. For example, in cases where the macroeconomic situation was not geared toward achieving short-term adjustment targets or containing long-term costs, the impact of fiscal policy instruments on the environment could be reviewed. However, such an undertaking would require an analysis of the way in which macroeconomic policy tools impacted on microeconomic aggregates in the real sector. While the empirical research that had been completed on behavioral relationships in well-developed market economies would facilitate such a task, considerable difficulties would arise in attempting to apply such an initiative to developing countries.

In its dealings with developing countries and in assisting those countries to formulate adjustment programs, the Fund had begun to recognize the impact of Fund-supported policies on poverty, and the goal of poverty reduction must continue to be emphasized, Mr. Fernando went on. Apart from the beneficial effect of reducing poverty on the environment, it was in the interest of safeguarding Fund resources to sustain adjustment efforts through a broad social consensus--a consensus that was easier to forge if the perceived benefits of adjustment could be shared by all. Nevertheless, it should be noted that the approach of the Fund with respect to poverty was to leave that issue largely to other institutions.

Against that background, his chair had no option but to support the approach to the environment outlined in paragraph 2(a) of Section VI of the staff paper, Mr. Fernando stated.

With respect to Fund involvement in the international coordination of environmental policies, the Fund should not go beyond national environmental concerns, Mr. Fernando considered. While the international dimension of environmental degradation was clearly a greater threat to future generations than the sum of national degradation, a question arose as to whether other aspects of the international environment were more relevant to the Fund's work. For example, the quality and sustainability of adjustment in developing countries could be enhanced through less inward-looking trade policies in industrial countries. The efforts of the Fund in resolving that problem thus far were not sufficient to build political confidence in its ability to address all areas of international cooperation.

As the initial steps taken by the Fund with respect to environmental issues should be modest and tentative at best, he did not see a need for additional staff resources to be devoted to that specific area, Mr. Fernando concluded. The Fund should seek more equitable and efficient means to share the administrative costs of surveillance and policy advice in the event that a significant increase in the workload was expected, in particular in an area that did not have a direct or obvious beneficial impact on the attainment of macroeconomic objectives.

The Chairman remarked that several Directors had suggested that the Fund staff should take environmental considerations into account in its work with members. As the existing staff was already overburdened, it would not be possible to increase staff awareness of environmental considerations unless some operational significance was given to the proposals currently under consideration. He wondered whether Directors could agree that some, albeit limited, additional staff resources were needed to focus on environmental issues.

Mr. Fernando recalled that over the past year or so, several staff reports on Article IV consultations with members as well as some PFPs had incorporated the consideration of environmental issues. An extension of the existing practice with respect to the environment would be appropriate, and it would not require additional resources.

Mr. Hogeweg made the following statement:

The importance of environmental issues can hardly be overemphasized, as it is becoming increasingly and abundantly clear that these issues have regrettably been far too much neglected in the past, so much so that the adverse consequences of that neglect have become most pressing economic problems that weigh heavily on the prospects of many of our member countries.

The staff paper mentions in particular poverty and population pressures as causes of environmental degradation. This is certainly true of population pressures. Ultimately, the issue is how large a human population the planet can sustain on a long-term basis and at what standard of living, given the state of technology. It could also be argued that wealth creates pressures on the environment because it creates demand for polluting activities and products, including energy consumption. This reasoning is implied in the staff paper with respect to an optimal balance between environment and growth. This is, of course, quite distinct from the room for maneuver that growth can create to take measures to protect the environment, which the staff also mentioned.

On the questions of growth versus the environment, two important points should be taken into account. Traditionally

measured growth can be illusory and the prosperity it engenders transitory, as the staff paper correctly states. In that sense, there can be no trade-off, as the pursuit of such growth is a tragic mistake. Awareness of that is also crucial in the emphasis the Fund currently gives to growth-oriented adjustment, as Mr. Goos has emphasized. While there are data problems, in many cases, such problems are just as pressing in a traditional accounting framework.

The crucial role of microeconomic factors must also be considered. Ultimately, it is the matter of correctly pricing production inputs that can enable the market mechanisms to help solve some environmental problems. Conversely, the neglect of pollution costs in pricing has led to many of these problems. The severe environmental problems that have surfaced in economies that used to rely on central planning show this in the extreme. Of course, the whole field of environmental economics has to do with ways to ensure correct pricing against the mighty forces of vested interests that derive short-term and microeconomic gain from environmental neglect.

This feature of vested interests and microeconomics lies at the basis of many structural features of the economies of member countries more generally, those structural features that have a direct bearing on macroeconomic policy as such are very much of interest to the Fund and are the focus of attention in many Fund-monitored programs. However, neither on structural issues generally nor on the environment has the Fund a comparative advantage, and the staff paper rightly signals that the operational difficulties of the staff have already been exacerbated by Fund intervention on such issues, weakening our position in the field of macroeconomic issues.

The staff paper focuses on the analysis of how environmental measures might affect macroeconomic equilibrium, but it seems the real question should be expressed the other way around. The environmental preferences of members and many of the related structural features of the economies are essentially given for the Fund. We have to formulate our macroeconomic advice essentially within that framework. However, the Fund should be aware of questions concerning the obvious influence certain macroeconomic policies will have on the environment, given the structural aspects of the economy concerned. Yet, it is up to other world organizations, better suited to the task, to persuade their member countries to include environmental issues in their national agenda and to give those issues their correct priority, and it is then up to the national authorities to present these priorities to the Fund. Such a procedure will minimize any direct interdependence between the Fund and other organizations.

With respect to the issues for discussion, the Fund certainly should not ignore environmental issues. However, apart from basic and very necessary awareness of these issues, the Fund's role on the environment can only be limited. The Fund lacks the expertise and its focus and mission is a different one. However, the practice described in Section V of the staff paper, which basically follows from being aware of the issues involved, would be welcome, but we should refrain from making a separate Fund assessment of the impact of specific policies on the environment. Instead, the Fund should rely totally on the expertise of others. While this will increase the interdependence of the Fund and the World Bank, such interdependence is by far preferable to a duplication of effort and arguments over the division of labor. I have not been convinced of the need to add even a small environmental unit to the Fund staff; the Fund should leave transnational and global issues to other forums.

Mr. Quirós commented that as Fund-supported programs were usually the result of macroeconomic policy failures, a direct linkage between Fund policies and environmental issues did not exist. Yet, the protection of the environment was a worldwide responsibility that the Fund should recognize in the same manner as other problems, such as those related to population, peace, poverty, education, health, and social justice. However, the Fund should accept the fact that its role was extremely limited, owing to the nature of its basic objectives of promoting international cooperation among member countries on monetary issues and facilitating balanced growth of international trade.

Therefore, he was in general agreement with the comments put forward in Mr. Goos's opening statement, Mr. Quirós said. However, he did not agree with Mr. Goos that the promotion of growth was only mentioned as a secondary or derivative objective in the Articles. Indeed, Article IV, Section 1 of the Articles clearly stated that the essential purpose of the international monetary system was to provide a framework that sustained economic growth.

Mr. Kyriazidis made the following statement:

The environment has come to be considered a central problem in world economic development, and the Fund cannot ignore it. However, although the protection of the environment is a crucial issue concerning the quality of life for both present and future generations, it is essential that it be addressed within the framework of a clear set of principles that do not deviate from the primary tasks of the institutions involved.

Therefore, it is essential to define the possible involvement of the Fund in environmental issues in the light of its nature and functions as a monetary institution. The staff has made a valiant

effort through a very flexible interpretation of Article IV to provide the legal grounds for possible Fund involvement in environmental issues. While I am not a strict constructionist, the interpretation offered by the staff seems to be on the activist's side. Although this interpretation is somewhat liberal, I would be willing to go along with it if the assumption of a role for the Fund in this field were clearly defined and firmly placed within the framework of the Fund's primary responsibility.

This institution is concerned with the design and implementation of appropriate macroeconomic policies and structural adjustments that tend to promote macroeconomic balance with growth and external viability in the light of member countries' priorities and policies. As the staff paper points out, however, the effect of macroeconomic policies on the environment is at best indirect and often ambiguous.

The arguments of the environmentalists concerning the effects of poverty, induced allegedly by adjustment programs, or of exchange rate policies on the depletion of resources are at best tenuous as convincingly demonstrated by the staff and, in any case do not constitute a valid reason for a deviating from the pursuit of macroeconomic balance. To the extent that such links may appear to exist, they reflect social and economic structures that other institutions are more qualified to deal with. To a considerable extent, this is also true of some trade-offs examined by the staff.

In the light of its objectives, the Fund's action should be guided by the principle that environmental concerns should be accommodated within the macroeconomic framework that is in each case appropriate, in the same way that, for example, social and educational policies are addressed. The fundamental choices between the trade-offs described by the staff would be for the authorities to make, in the light of the perceived acuteness of the problem and their order of social and political priorities.

Consistent with this reasoning, it is entirely appropriate that the Fund, within the framework of its surveillance function, pay attention to the instruments used for the implementation of environmental policies that might affect macroeconomic variables, distort the process of allocation of resources, or interfere unduly with the achievement of macroeconomic balances without interfering with policy, which rightly belong to the national authorities.

It would be inappropriate, to introduce environmental issues in Fund conditionality, if only in light of the risk that the Fund might be perceived as interfering with political choices and

priorities set by the national authorities. This approach would exclude, of course, consideration by the Fund in its surveillance operations of environmental issues of an transnational or global character, unless there are specific commitments by the country concerned with clear macroeconomic implications. Transnational problems do not come under the purview of the Fund and, in any case have to be resolved through specific international agreements with the assistance of specialized international institutions that can establish the specific forms and programs for appropriate international action. To the extent that such programs are in place, their macroeconomic implications will have to be taken into account.

In the light of these considerations, the approach described in paragraph 2a of Section VI of SM/90/219 is acceptable.

I would also be willing to go along with the extended involvement outlined in paragraph 2b of that section of the staff paper in cases where there is clear and convincing evidence that Fund objectives might have adverse environmental effects were it not for the ambiguities involved in assessing the environmental effects of policies aimed at macroeconomic stability and external viability, that are usually conceived by the Fund and the disturbing suggestion contained in paragraph 2b that in such cases, the Fund might accept for environmental considerations a departure from its normal macroeconomic objectives.

Finally, I agree with Mr. Goos that an approach based along the lines described in those paragraphs would minimize the possible additional pressures on staff resources.

Mr. Zhang said that, as he was in general agreement with the staff's recommendation, he could limit his remarks to a few comments.

First, environmental issues and the protection of the environment were important issues that certainly merited attention from international institutions, including the Fund, Mr. Zhang stated. Nevertheless, he agreed with the reasoning presented in the staff paper that the Fund's concerns and involvement with environmental issues should be in line with its monetary character and the provisions governing the functions and purpose of the institution. Therefore, he could associate himself with the view expressed in Mr. Goos's opening statement that there was only a very limited role the Fund could usefully play in environmental issues.

Second, he agreed with the staff that any Fund involvement in environmental issues should be based on evidence that was both convincing and obvious, Mr. Zhang commented. As previous speakers had indicated, the Fund's involvement in environmental issues should be in line with its mandate.

There was no need for the Fund to develop its own environmental capacity as such. Other institutions, such as the World Bank and relevant UN and nongovernmental organizations, had already developed their expertise and had a comparative advantage in that area. Therefore, it was important for the Fund to make the best use of the findings of those organizations. At the same time, the Fund staff should be encouraged to keep contacts with major environmental groups and institutions.

As the approach taken by the Fund with respect to environmental issues would not entail too many implications for its operations and resources, it should not affect the principles of Fund conditionality and Fund resources, Mr. Zhang concluded. He agreed with previous speakers that environmental issues should be addressed in the context of Article IV consultations with members.

Mr. Nakagawa commented that he could associate himself with the views expressed in Mr. Goos's opening statement. His chair was in broad agreement with the feasible approach for Fund involvement in environmental issues considered in Section V of the staff paper.

As Mr. Al-Jasser had stated, protection of the natural environment was a noble objective that could not be opposed, Mr. Nakagawa continued. However, while recognizing the importance of being environmentally conscious in forming Fund policy, the staff at the same time should be aware of the limitations to Fund involvement arising from such factors as the monetary character of the Fund's mandate, the macroeconomic orientation of its policies, and the lack of staff expertise in that area.

As to the choice between paragraphs 2a and 2b in Section VI of the staff paper, the rule on convincing-and-obvious evidence appeared to be the only plausible rule by which to define or limit Fund involvement in environmental issues, Mr. Nakagawa went on. However, he had doubts about whether that rule was pragmatic. As the staff analysis clearly showed, the difficulties of addressing environmental issues stemmed from the complexity and ambiguity attached to the linkage between policy actions and effects on the environment. As the staff paper also showed, in most cases judgment as to whether certain environmental policies could have macroeconomic effects on, say, output, fiscal balance, and balance of payments could only be formed on a case-by-case basis, and it was impossible to establish general guidelines for making such judgments.

In the light of the above-mentioned considerations, he preferred the option described in paragraph 2a of Section VI as an appropriate approach to environmental issues, Mr. Nakagawa stated.

Unless the Fund had a proper analytical macroeconomic framework that was able to measure environmental costs and benefits quantitatively, the implications of environmental factors should be given less priority in formulating Fund macroeconomic policy advice, Mr. Nakagawa considered.

With respect to Ms. Hansen's proposal to establish a small task force in the Fund to watch environmental issues, his chair was not fully convinced of the need to further mobilize the Fund staff on that issue, Mr. Nakagawa concluded.

Mr. Ahmed noted that in recent years, environment degradation had become a matter of heightened concern for both developing and industrial countries. There was increasing evidence that sound environmental management was essential for maintaining the natural resource base upon which nations depended for their continued economic development, since the sustainability of economic growth and the quality of the environment were closely interrelated.

Concerns that there might be serious implications of environmental degradation for sustainable economic growth, and, possibly, of macroeconomic policies for the environment were widely shared, Mr. Ahmed stated. Thus, the main issue to be considered was whether the Fund should expand its agenda to incorporate environmental concerns into its operations. While there might be arguments against doing so, the balance of views expressed thus far favored some involvement, but only where there was clear and convincing evidence of an unambiguous channel of influence between environmental concerns and macroeconomic objectives.

A careful delineation of the Fund's role was needed for several reasons, Mr. Ahmed considered. Most important, however, as the staff had pointed out, in cases where a member's macroeconomic policies had potentially adverse implications for the environment and the required policy responses involved various trade-offs, there would be a risk that the Fund could be seen as intruding into the internal microeconomic policies of members. Thus, while there would be no harm if the Fund were to discuss with the country the possible alternative policy mixes, the final choice of the mix of policies and the priorities that the authorities wished to assign to them should remain the prerogative of the member country.

The mandate and expertise of the Fund did not lend itself to involvement in the identification and resolution of global or transnational environmental problems, Mr. Ahmed concluded. That remained the primary responsibility of other multilateral agencies. However, the Fund had a role to play in that it should take into account any relevant international consensus or agreement regarding the environment, in its policy advice.

Mr. Marino stated that, like previous speakers, he attached great importance to environmental issues. His chair had even ventured to link ecological problems to the international monetary system, by arguing that high real interest rates were detrimental to the environment, given that ecological projects, like reforestation, became unprofitable.

Therefore, he welcomed the interest the Fund has shown in environmental issues, Mr. Marino commented. In general, greater awareness and analysis of environmental problems could go a long way toward the solution of such problems. In that connection, perhaps the Fund staff did have a comparative advantage in making a professional economic evaluation of the issues at stake.

He fully endorsed the view that environmental problems resulted typically from a lack of definition of property rights, Mr. Marino said. However, that subject went beyond the realm of macroeconomic policies and involved institutional aspects of the countries concerned. Therefore, Fund involvement on that topic should be limited in scope to that outlined in paragraph 2a of Section VI of SM/90/219.

Mr. Santos commented that his authorities shared the concerns that had been expressed internationally with respect to the environment and had endorsed the numerous calls that had been made for a coordinated response at the international level to reduce or contain the degradation of the environment and protect it for future generations.

As the staff paper indicated, in response to those calls, a number of multilateral agencies, including the World Bank and the UNEP, had taken steps to include environmental issues explicitly in the design of their projects and programs with member countries, Mr. Santos noted. Despite its monetary character, the Fund could not afford to appear insensitive to environmental issues. Therefore, he could see an interest for the institution to adopt in the context of its macroeconomic policy advice to member countries an approach that would take into account environmental issues. A compelling case could be made for the adoption of environmental policies when Fund macroeconomic and structural policy recommendations had convincing and obvious impact on the environment.

However, there were many practical difficulties to be taken into account in considering Fund involvement in environmental issues, Mr. Santos considered. The staff paper highlighted some of the limitations, policy conflicts, and trade-offs that would have to be made if the Fund became actively involved. Of those limitations, it was worth focusing on the constraints on staff resources, the perceptions about the Fund encroaching on other organizations' spheres of competence, and more important, on the prerogatives of members to freely make microeconomic choices. He fully agreed with the staff that the incorporation of environmental issues into the Fund's operational work could open the institution to double-edged criticism and exacerbate the operational difficulties of the staff. Under the circumstances, it would be difficult to advocate the explicit inclusion of environmental concerns in Fund operations. Fund involvement in environmental issues should not affect the principles underlying Fund conditionality and the use of its resources. In addition, as Mr. Fogelholm had suggested environmental issues should not be considered in the establishment of performance criteria related to Fund programs.

In conclusion, he could see a limited role for the Fund in environmental issues, with it relying more on the expertise of other specialized agencies, Mr. Santos concluded. In that respect, he could support an approach in which the Fund's involvement would be developed in the context of its existing working relationship with the World Bank and could be further strengthened in order to include other international organizations with an expertise in environmental issues.

Mr. Mwananshiku said that few would argue against the general principle of promoting public policy that protects the environment. As there were important linkages between the environment, long-term economic growth, and the quality of life, good stewardship of natural resources was important for present and future generations. However, a question arose as to whether that was an area for Fund involvement.

The staff was correct in emphasizing the two main points that appeared to form the linchpin of its analysis, namely, that it made little sense for all multilateral institutions to simultaneously direct their limited resources to environmental issues and that the Fund's environmental role, if any, must be modest, Mr. Mwananshiku noted. Embedded in those two points was the concern that the Fund could not and must not be all things to all people. With respect to the environment in particular, the Fund could hardly be expected to play a meaningful role, as it lacked even the basic expertise to do so. As the staff had indicated, effective solutions to environmental problems might be far beyond the competence and capacity of the Fund staff.

The Fund must not be oblivious to obvious environmental implications of its policy advice, and, at least at the theoretical level, environmental policies could potentially affect the budget and the balance of payments as well as output, prices, and employment, Mr. Mwananshiku said. However, the staff was correct to suggest that policy prescriptions to alter the relationship between those variables could not be generalized.

The approach suggested in Section V of SM/90/219 in considering environmental questions in policy dialogue with member countries highlighted the predicament of the Fund in dealing with problems that were multidisciplinary in character, Mr. Mwananshiku considered. That suggestion overlooked the character of the problem by narrowing the question to one of economic inefficiency to be corrected simply by applying the tools of neoclassical analysis, namely the adoption of appropriate pricing and tax policies. That suggestion pointed to the need for caution in that the Fund was being asked to do something for which it was not equipped. The staff had resorted to the tools available to it, with predictable conclusions. The specific points raised in Section V of the staff paper pointed to questions of subsidizing gasoline and fertilizer prices. That trend of emphasis was likely to have a greater impact on developing countries, since there was little reason, if any, to assume that surveillance procedures on the environment would be more effective than the current approach that dealt strictly with

economic matters. The Fund should avoid a situation in which additional conditionality could arise under the rubric of promoting sound environmental policies. The taxation of polluters was another area that required careful consideration. To succeed on the regional level, all other countries would need to adopt similar charges; otherwise, the cost of production of the individual country would rise and might cause firms to relocate abroad. Reaching regional agreements might be difficult as national authorities sought to protect their advantages.

Therefore, he agreed with previous speakers that Fund participation in environmental issues in its policy dialogue with member countries should be modest, leaving such matters to the other multilateral institutions that were more competent to deal with the many complex political and technical problems involved, Mr. Mwananshiku concluded.

Ms. Hansen stated, with respect to the references that had been made by at least one previous speaker to the situation of Eastern Europe, it should be noted that if the Fund had not been heavily implicated in environmental issues through its activities in the past, it clearly would be in the future through its assistance to Eastern European countries. As Directors were aware, environmental degradation in that area had reached an advanced stage; in providing balance of payments assistance and policy advice to Eastern European countries, the Fund would clearly be involved in the efforts to reduce pollution in that region.

She agreed with other speakers that the appropriate response of the Fund in many cases would be to refer environmental problems to other institutions that had a greater expertise in that area, Ms. Hansen said. However, such a response would not address cases in which the Fund's policy advice had had negative effects on the environment. Would the Fund seek advice from the World Bank on how it should change its policy advice? Moreover, if--as many speakers had noted--the Fund had no expertise in environmental issues, how would it be able to identify cases involving a prospective need to balance economic policy prescriptions with environmental concerns? In the light of those considerations, it would be contradictory to assert, on the one hand, that the Fund staff should be aware of environmental issues and, on the other hand, that the staff had no expertise in that area.

If Directors were sincere in acknowledging that the Fund should not ignore environmental issues and that the staff should increase its awareness of those issues, the Fund would need to have a capacity--in the form of a two- or three-person unit--to help desk economists understand the sort of problems they should be looking for, Ms. Hansen concluded.

The Chairman remarked that he strongly agreed with Ms. Hansen on the need to give some operational significance to the proposal to increase awareness of environmental issues within the Fund. Indeed, a limited number of not more than two or three additional staff would be needed if only to

make a minimal assessment of the environmental consequences of Fund policy advice, to read about developments in environmental research, and to organize the Fund's cooperation with other agencies.

As Ms. Hansen had correctly pointed out, the poor technological use of coal, inter alia, in heating the cities of Eastern Europe had created widespread environmental degradation, the Chairman said. As the countries of that region began progressively to substitute less environmentally detrimental energy sources for the use of coal, they would be faced with complex economic and political problems. The Fund would be involved in the debate concerning the appropriate pace of economic reform in Eastern Europe as well as the multitude of related macroeconomic policy choices arising from the adjustment efforts of those countries. That alone pointed to a need for the Fund to increase its sensitivity toward the linkages between economic policy choices and environmental concerns.

Nevertheless, as several speakers had noted, there was a limit to the Fund's capacity to deal with environmental problems; thus, an effort should be made to enhance cooperative efforts between the Fund and other agencies in that respect, the Chairman added. A question of consistency would arise if the Fund acknowledged the seriousness of environmental degradation, but did nothing to address the problem.

He could understand the concerns that had been expressed with respect to the tendency of bureaucracies to grow, but previous experience and the current size of the Fund staff clearly attested to the fact that that so-called snowballing characteristic did not apply to the Fund, the Chairman concluded.

Mr. Al-Jasser commented that he agreed with the Chairman on the need for the Fund to be consistent. Indeed, it was for that reason that he had been forthright in stating that, although the problem of environmental degradation was a serious cause for concern, there were organizations, other than the Fund, that were well-equipped to deal with that problem. He would not object to letting other organizations, such as the World Bank and the UNEP, not only taking the lead in dealing with problems concerning the environment, but also complete responsibility for helping countries design and implement policies designed to solve those problems.

Also with respect to the need for consistency, taking an active role in the effort to safeguard the environment would open the Fund to criticism from groups that considered other social issues, such as income distribution, literacy, and health, more important to economic growth and development, Mr. Al-Jasser noted. The Fund could, thus, be confronted with demands to get involved in more areas than it could conceivably deal with. As the Fund could not please everybody, it should focus on fulfilling its existing mandate as effectively as possible.

The Chairman responded that he did not disagree with Mr. Al-Jasser that other agencies were better equipped than the Fund to deal with environmental problems. However, in order to call such problems to the attention of other agencies, the Fund staff would need to be able to determine that a problem existed, the magnitude or prospective seriousness of the problem, and the most appropriate agency to call on for assistance. Additional staff would clearly be needed even to fulfill that coordinating role.

Mr. Al-Jasser recalled that the Fund was concerned with many social issues related to economic development, but it had never sought to develop in-house expertise related to those issues. There was no justification for giving greater weight to the need for environmental preservation than to other needs, such as for improved health or education. Indeed, it would be extremely difficult to imply that efforts to safeguard the individual were less important than efforts to safeguard the environment.

In the event that the Board agreed to devote staff to look after environmental issues, the manpower resources so allocated should be limited to one economist, Mr. Al-Jasser considered.

Mr. Végh stated that he had difficulty with the Chairman's justification for the creation of a special unit, no matter how small, to deal with environmental issues. He agreed with Mr. Goos that the same justification could be used to support the establishment of similar units for a number of important social issues. For example, the need to improve education was tremendously important to economic development, and Fund-recommended policies, in particular with respect to budgetary restraint, had very damaging consequences on education, but the Fund had not devoted a special unit to educational issues.

In that connection, it should be noted that the expansion of staffing in international organizations and the size of their missions had a negative effect on economic development, Mr. Végh said. For example, one country in Latin America had recently been visited by a mission consisting of 40 international experts--26 from the World Bank, 12 from the Inter-American Development Bank, and 2 from the Fund. As one of the most scarce resources to governments in developing countries--as well as in industrial countries--was talented and dedicated civil service personnel, it was detrimental to have such large missions demanding the time and attention of a members' authorities. To the extent that the current small size of the Fund staff, in itself, contributed to the efficiency of member countries, the creation of new units within the Fund would risk exacerbating the negative impact of mission work.

The Chairman responded that the problem of environmental degradation was different from other social issues in that the Fund staff knew what relative portion of a member's budget could be devoted to health, education,

and welfare. It knew little about environmental preservation, other than that issues related to the environment could be extremely sensitive politically.

With respect to mission work, it was important for the Fund staff to be able to determine which situations warranted the assistance of environmental experts, the Chairman said. In that connection, it should be noted that the staff devoted to environmental issues would not be expected to travel, so they would not add to the burden sometimes imposed on members by the size of missions. Indeed, the staff members assigned to environmental issues would travel only on those rare occasions when they could deal with the prospective problem by themselves.

Mr. Kyriazidis commented that his chair would consider the proposal for a special unit to monitor developments with respect to the environment. However, the Fund was not in a position to advise its members that priority should be given to controlling emissions or replacing coal with another energy source in order to prevent further pollution; such decisions were to be taken by the authorities. The appropriate role of the Fund was to help its members place the decisions that had been taken with respect to such issues and their priorities within a viable macroeconomic framework. In that respect, he agreed with Mr. Al-Jasser that the Fund should seek to accommodate environmental concerns in the same way it accommodated other social concerns, namely, within a macroeconomic framework. It would be inappropriate for the Fund to get involved in any examination of which social issues should be given priority, as that would involve microeconomic choices, which were outside the expertise and the responsibility of the Fund.

Ms. Hansen stated that if the Fund overlooked the environmental consequences of its actions, they could result in disaster not only in terms of environmental preservation, but also in terms of the public support and resources that would be available to the Fund in the future. For example, if the Fund was able to move quickly in advising a country that was relying on the use of brown coal on the urgent need to trim its budget deficit, but left it to the authorities to make decisions related to the expenditure-cutting and revenue-enhancing measures to achieve that goal, the resulting public perception might be that the Fund had condoned the continued use of brown coal that was causing extensive environmental degradation and, therefore, that the Fund was completely callous with respect to safeguarding the environment. Such a disaster could easily be avoided, if the Fund devoted a limited amount of well-spent resources to monitoring the prospective impact of its advice on the environment.

Mr. Kyriazidis remarked that the argument put forward by Ms. Hansen was a cause for concern. Fears that the Fund would be held responsible in the event that a program supported by one of its facilities contributed to environmental degradation could only lead to serious problems concerning the role of the Fund. While the Fund could recommend--and indeed had

recommended in numerous cases--that a certain ceiling be placed on government expenditure, it was up to the authorities to determine which expenditures to cut. He wondered whether Ms. Hansen intended to suggest that, in order to avoid criticism in the event that a Fund-monitored program led to environmental problems, the Fund should adjust its requirements concerning macroeconomic ceilings and adjustment, or that it should tell countries how to handle their environmental problems. The latter course of action would entail a danger of trying to govern members, and the former would subject the Fund's macroeconomic advice to caveats concerning the environment.

Ms. Hansen replied that the Fund should at least be armed with the knowledge to assess situations involving prospective environmental problems and to call on the advice or assistance of other organizations. While it was neither desirable nor, indeed, possible to safeguard the Fund against all forms of criticism, the Fund should not be blindsided, owing to actions it had unwittingly taken with respect to a member country.

Mr. Quirós suggested that it might be helpful to view the role of the Fund with respect to the environment in terms of the law of comparative advantage. Indeed, the founders of the United Nations had used a great deal of wisdom in establishing separate and specialized institutions to address various problems within the international community, such as: the United Nations to maintain peace; UNESCO to promote education, science, and culture; WHO to improve health standards; FAO to deal with agricultural problems; ILO to address labor issues; the Fund to maintain stability in the international monetary system; and the World Bank to deal with problems related to development.

The law of comparative advantage should be applied in Bank-Fund collaboration in determining which institution was better equipped to address specific problems, and collaboration should be enhanced with respect to problems that fell within the mandate of both institutions, such as those of poverty, Mr. Quirós considered. In that context, it should be noted that the World Bank had already examined the environmental situation of Eastern Europe, and prospective World Bank lending to countries in that region amounted to \$4 billion, of which \$2.4 billion was to be aimed at reversing environmental degradation.

As the Fund was a global institution, a special unit should be established within the Fund only if the world required it, Mr. Quirós concluded. While the problems of environmental degradation in the Eastern European region were a serious cause for concern, other issues, such as poverty, needed to be resolved throughout the world.

Mr. Fogelholm commented that he fully supported Mr. Quirós's comments. Indeed, the UNEP had been established expressly for the purpose of addressing environmental issues.

Although many governments were currently engaged in studying environmental problems, the Fund's traditional approach to such issues was to abstain from becoming involved under the guise that its mandate could not be extended, Mr. Fogelholm noted. Indeed, the current involvement of the Fund in efforts to alleviate poverty represented the furthest step it had ever taken toward accommodating critics of the organization--and it had done so elegantly by addressing that issue on a case-by-case basis within the framework of its existing resources.

Indeed, for several reasons, Mr. Quiros was correct to point out that the Fund should treat environmental issues along the same lines as poverty issues, Mr. Fogelholm stated. First, if the Fund extended its mandate beyond that of offering macroeconomic advice to its members in order to address problems related to the environment, it would be more open to pressure from critics to also get involved in other social issues, many of which comprised microeconomic policy choices. Therefore, in order to extend its work into the area of the environment, the Fund would need clear evidence of a direct short-term linkage between economic policymaking and environmental concerns. Second, the establishment of a special unit to address environmental issues would leave the Fund more open to criticism from environmentalists, because in setting up such a unit, the Fund would acknowledge responsibility for the environment--an area in which it did not have expertise. Moreover, the example of Eastern Europe given by Ms. Hansen pointed to another danger, in that the Fund should avoid entering into any debate concerning alternative energy sources, in particular given the conflict between various lobbies and interest groups.

Mr. Binay said, with respect to the proposal that a unit should be established to coordinate with other institutions in addressing environmental problems, that he wondered whether the Fund had on previous occasions coordinated with other agencies in addressing other social issues. For example, had the Fund sought advice from ILO in recommending wage policies to its members?

Mr. Wright stated that he fully agreed with the comments made by Mr. Fogelholm. The issue currently under consideration seemed to center on the extent to which the Fund's mandate would justify its becoming actively involved in environmental issues. If the existing mandate of the Fund justified such involvement, then the need to address those issues should be accommodated within the existing structure of the Fund's operations. If not, the issue was whether the Fund's work could effectively be extended into new areas.

In the latter case, he was skeptical about whether an environmental unit would remain small, Mr. Wright remarked. Previous experience indicated that "special" units within institutions had a tendency not only to grow, but also to inspire the establishment of other "special" units.

Nevertheless, if such a unit were established within the Fund--and he hoped that it would not be--it would clearly entail net costs, which should be carefully monitored to ensure that resources would not be transferred away from areas that fell within the mainstream of the Fund's work, Mr. Wright concluded. Moreover, in the event that a budgetary appropriation was needed to facilitate the work of an environmental unit, he hoped that the chairs supporting its establishment would also explicitly support that appropriation.

Ms. Hansen said that it was not her intention to suggest that the Fund should devote more attention to environmental issues than to other social issues. Indeed, the Fund should do less. For example, while the Fund was considering with its members the design of social safety nets to address poverty issues, she did not consider that the Fund should become involved in the design of energy policy. However, the Fund should be aware of the impact of its policy advice on the environment. For example, the Fund should be aware that, in failing to insist on appropriate price signals for a range of alternative energy sources, it might give the impression that it was tolerating the continued use of brown coal, but not of other energy sources, thereby, aggravating an already very serious environmental problem.

The Director of the Fiscal Affairs Department noted that the Fund's Articles of Agreement were written in a way that would enable it to adapt to evolving circumstances in the international monetary system. Indeed, previous experience had demonstrated the ability of the Fund to effectively address problems that could not have been foreseen at the time the Articles were drafted in a manner that was consistent with its main objectives.

In recent years, the Fund had received numerous complaints from various environmental groups that certain Fund-monitored policies had had damaging effects on the environment, the Director of the Fiscal Affairs Department said. While the tendency of the Fund in the past was to ignore such criticism on the basis that its traditional mandate did not extend to the consideration of environmental issues, it could become increasingly difficult for the Fund to continue that stance for two main reasons. First, it was difficult to define macroeconomic policy in operational terms, as it was actually the overall result of a variety of tax and expenditure decisions, many of which involved microeconomic policy choices. Second, recent studies by the World Bank, the OECD, and other international and national institutions had identified linkages between macroeconomic and structural policies and the environment. Therefore, it could become increasingly difficult for the Fund to ignore the complaints of environmentalists in the future, especially if further evidence indicated that some policies recommended by the Fund had in fact had significant adverse environmental repercussions.

However, a decision not to ignore environmental issues gave rise to a number of tactical questions, the Director of the Fiscal Affairs Department noted. For example, many Directors had suggested that the

Fund staff should rely on the expertise of other institutions, such as the World Bank, the OECD, and the UNEP, that were already heavily involved in matters related to environmental preservation, but the vast amount of research currently under way in that area pointed to a need to filter out the information that would be relevant to the Fund's work and to disseminate it appropriately within the Fund. For example, 200 World Bank staff were currently assigned to tasks involving environmental issues. How could the knowledge of the World Bank staff be transferred to the Fund staff in an efficient and timely manner?

In addition, the work of other organizations, including the World Bank and the UNEP, was related to specific issues or projects, while the Fund staff would, of course, be most interested in ascertaining how it could avoid creating or exacerbating environmental problems in the context of Article IV surveillance and its macroeconomic policy advice, the Director of the Fiscal Affairs Department added.

Against that background, it did not seem realistic to indicate that the Fund staff could increase its awareness of environmental problems without providing a means for it to do so, the Director of the Fiscal Affairs Department concluded. In that connection, and in light of the workload of existing staff, a few additional staff were needed to gather, filter, and disseminate relevant information throughout the Fund.

Following some further discussion, Directors agreed that, as a basis for conclusion of the Board's consideration on the subject, the Managing Director would put forward a statement, summarizing the discussion and giving detailed terms of reference for proposed use of staff resources on environmental issues.

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LEO VAN HOUWEN
Secretary