

REPORT No. 21870

**THE WORLD BANK
INSPECTION PANEL**

**INVESTIGATION REPORT
ON
ECUADOR MINING DEVELOPMENT AND
ENVIRONMENTAL CONTROL TECHNICAL ASSISTANCE
PROJECT
(LOAN NUMBER 3655-EC)**

February 23, 2001

**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
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IPN REQUEST RQ99/7

February 23, 2001

MEMORANDUM TO THE PRESIDENT OF IBRD

**SUBJECT: The Inspection Panel Investigation Report
Ecuador: Mining Development and Environmental Control
Technical Assistance Project
(Loan No. 3655-EC)**

Pursuant to paragraph 22 of the IBRD Resolution 93-10 (the "Resolution") establishing the Inspection Panel, and paragraph 53 of the Panel's *Operating Procedures*, please find attached the above-referenced Report.

The Report concludes that Management was substantially in compliance with the provisions of OD 4.01 on Environmental Assessment (formerly OD 4.00, Annex A) except as noted below; OPN 11.02 on Wildlands (now OP/BP 4.04 on Natural Habitats); and OD 13.05 on Project Supervision. However, the Panel finds that Management was in apparent violation of certain provisions of the policies and procedures on Environmental Assessment (OD 4.00, Annex A and OD 4.01) relating to processing, geographical scope, baseline data, and concerning consultation during preparation.

Please be advised that according to paragraph 23 of the Resolution, "within six weeks from receiving the Panel's findings, Management will submit to the Executive Directors for their consideration a report indicating its recommendations in response to such findings."

We sincerely hope that our Report and findings will be of value to the Requesters, the Bank and other project stakeholders.



Attachment

The World Bank Inspection Panel

The Inspection Panel was created in September 1993 by the Board of Executive Directors of the World Bank¹ to serve as an independent mechanism to ensure accountability in Bank operations with respect to its policies and procedures. The Inspection Panel is an instrument through which groups of two or more private citizens who believe that they or their interests have been or could be harmed by Bank-financed activities may present their concerns through a Request for Inspection. In short, the Panel provides a link between the Bank and the people who are likely to be affected by the projects it finances.

Members of the Panel are selected “on the basis of their ability to deal thoroughly and fairly with the request brought to them, their integrity and their independence from the Bank’s Management, and their exposure to developmental issues and to living conditions in developing countries.”² The three-member Panel is empowered, subject to Board approval, to investigate problems that are alleged to have arisen as a result of the Bank having ignored its own operating policies and procedures.

Processing Requests

After the Panel receives a Request for Inspection it is processed as follows:

- The Panel decides whether the Request is prima facie not barred from Panel consideration.
- The Panel registers the Request—a purely administrative procedure.
- The Panel sends the Request to Bank Management, which has 21 working-days to respond to the allegations of the Requesters.
- The Panel then conducts a short 21 working-day assessment to determine the eligibility of the Requesters and the Request.
- If the Panel does not recommend an investigation, and the Board of Executive Directors accepts that recommendation, the case is considered closed. The Board, however, may approve an investigation against the Panel’s recommendation if it so warrants.
- Three days after the Board decides on whether or not an investigation should be carried out, the Panel’s Report (including the Request for Inspection and Management’s Response) is publicly available at the Bank’s InfoShop and the respective Bank Country Office.
- The Panel undertakes a full investigation, which is not time-bound.
- When the Panel completes an investigation, it sends its findings and conclusions to the Board as well as to Bank Management.
- The Bank Management then has six weeks to submit its recommendations to the Board on what actions the Bank would take in response to the Panel’s findings and conclusions.

¹See Resolution No. IBRD 93-10; Resolution No. IDA 93-6, establishing “The World Bank Inspection Panel.” The Panel’s 1994 “Operating Procedures” provide detail to the Resolutions. For the purposes of the Inspection Panel, the “World Bank” comprises both the International Bank for Reconstruction and Development – IBRD and the International Development Association – IDA.

²Resolutions, supra note 1 at § 4.

- The Board then takes the final decision on what should be done based on the Panel's findings and the Bank Management's recommendations.
- Shortly after the Board's decision, the Panel's Report and Management's Recommendation are publicly available through the Bank's InfoShop and the respective Country Office.

Acknowledgments

The Panel could not have carried out its investigation without the very kind assistance of a large number of Government officials, representatives of civil society and Bank staff in Washington, DC, Ecuador and elsewhere, and it wishes to acknowledge and express its appreciation for their cooperation and support.

The Panel wishes to thank especially the Requesters and other NGOs and individuals for their assistance, and the numerous people it met in Quito, Cotacachi and the Intag Valley in Ecuador.

Under the Resolution establishing the Panel, the Bank alone is the object of Panel investigations. Bank staff members responsible for this Project did their best to respond to the Panel's questions and to its many requests for documents and other information. Bank headquarters staff and those of its Resident Mission in Ecuador were extremely helpful and the Panel wishes to acknowledge their assistance throughout the investigation.

The Panel also wishes to thank the Executive Directors representing Ecuador and their staffs for their advice and assistance, especially concerning the field visits, and the Ecuadorian Government officials in Quito who shared with the Panel their knowledge and commitment to the Project.

Finally, the Panel wishes to express its appreciation to its senior consultants Vernon Heywood and Mary M. Poulton, and to Natalie Bridgeman, consultant, for their professional contributions to the investigation; and to its Secretariat for their invaluable professional assistance during the preparation of this Report.

All of the people who assisted the Panel in this endeavor should share any credit given to this work but, of course, the Panel remains solely responsible for its findings and conclusions.

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Abbreviations and Acronyms

BP	Bank Procedures
CEDENMA	Ecuadorian Committee for Nature and Environment
CODIGEM	Corporation for Geological – Mining – Metallurgical Research and Development
DECOIN	Defensa y Conservación Ecológica de Intag
DINAGE	National Geology Directorate
DINAMI	National Mining Directorate
DINAMA	National Directory of Environment
EA	Environmental Assessment
ED	Executive Director
EIA	Environmental Impact Assessment
FEPS	Final Executive Project Summary
GOE	Government of Ecuador
GP	Good Practice
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IEPS	Initial Executive Project Summary
MEM	Ministry of Energy and Mines
MOP	Memorandum of the President
NGO	Nongovernmental organization
OD	Operational Directive
OP	Operational Policy
PRODEMINCA	Proyecto de Desarrollo Minero y Control Ambiental (Ecuador Mining Development and Environmental Control Technical Assistance)
RED	Regional Environment Department (in this report means LATEN - Latin America Environment)
SAR	Staff Appraisal Report

THE INSPECTION PANEL'S REPORT AND FINDINGS
ON THE
ECUADOR MINING DEVELOPMENT
AND
ENVIRONMENTAL CONTROL
TECHNICAL ASSISTANCE PROJECT

EXECUTIVE SUMMARY

The Project

1. The Ecuador Mining Development and Environmental Control Technical Assistance Project (the Project), known in Ecuador as PRODEMINCA, was identified in September 1989. It was prepared between 1990 and 1992 and appraised in December 1992. A US\$ 14 million equivalent Loan for the Project was approved by the Bank's Board of Executive Directors on October 21, 1993. Co-financing in the amount of US\$ 4.0 million equivalent and US\$ 4.7 million equivalent was provided by the United Kingdom's ODA (now DFID) and the Swedish BITS (now integrated into SIDA), respectively.
2. The Project comprises three major components: Sector Policy Management, Policy Implementation, and Project Coordination. The Policy Implementation component, in turn, comprises three parts: Mining and Environmental Health, Management of Mining Rights, and Geo-information. The Request concerns claims about the social and environmental consequences of three sub-components of the Geo-information part carried out in an area of Ecuador's Western Cordillera, which runs from north, near the border with Colombia to south, near the border with Peru (see Map inset).
3. According to the September 1993 Memorandum of the President (MOP), the two major objectives of the Project *"are to: (a) attract new private mining investment and support the systematic development of increased, yet environmentally sound, mineral production; and (b) arrest mining-related environmental degradation and mitigate the damage that results from the use of primitive and inadequate technology by informal miners."*
4. In the Panel's view, there appears to have been an evolution in emphasis toward the environmental dimensions of the Project since it was submitted to the Board in September 1993. This evolution appears to have accelerated significantly after the Request was received. This emerged in a number of discussions during the course of the investigation. It is also reflected in

the commissioning by PRODEMINCA of a series of publications. And is evident from a comparison of the Project's objectives as stated by Management in the September 1993 MOP, quoted above, and in the January 2000 Response to the Request.

5. In its Response, Management stated that the objectives "*are to reform the Ecuadorian mining sector and create an enabling environment to (i) assist Ecuador in the implementation of its mining legislation to attract private investment for, and support the systematic development of, environmentally sound mineral production; and (ii) arrest and mitigate environmental degradation that results from use of primitive and inadequate technology by artisanal and small-scale mining operations.*"

The Request for Inspection

6. The Request for Inspection was submitted by DECOIN (*Defensa y Conservación Ecológica de Intag* or Conservation and Ecological Defense of Intag), an Ecuadorian NGO, acting for and on behalf of persons living in the "Intag Area," and four representatives of the *Asociación de Caficultores "Rio Intag"* (Association of the Coffee Growers of Rio Intag) (the Requesters).
7. The Requesters claim that the communities they represent are likely to suffer material harm as a result of failures and omissions by the Bank in the design and implementation of the Project. In particular, they claim that the public release of maps with mineral data collected under the Project's Geo-information component will attract mining companies and "informal" miners. In their view, this would have a destructive impact in the areas where they live and on the protected areas and their buffer zones. It would also prevent local communities from continuing to work on their traditional farming and ecotourism activities, and trigger grave social problems within their communities. They maintain that mining activities in these areas would be unavoidable should the geo-information maps and data reveal the existence of mining potential in the region, and would result in significant degradation of critical natural habitats, including the ecosystem of El Chocó and the Cotacachi-Cayapas Ecological Reserve. The latter is recognized as one of the world's richest remaining natural habitats and threatened biodiversity hotspots.

Registration of the Request

8. On December 17, 1999, the Inspection Panel registered the Request for Inspection noting that the Requesters' allegations could constitute violations of, inter alia, the following Bank Policies and Procedures: OD 4.01 on Environmental Assessment; OPN 11.02 on Wildlands, (now OP/BP 4.04 on Natural Habitats); and OD 13.05 on Project Supervision.

Management's Response

9. In its Response, received on January 18, 2000, Management stated that it has complied with all operational policies and procedures applicable to the matters raised by the Request. Noting that the Request for Inspection relates only to the thematic mapping

(geo-information) sub-component of the Project, Management explains that the kind of mapping being used in the Project, namely a broad regional scale of 1:200,000, is internationally recognized as a legitimate and basic, environmentally neutral, activity that is conducted by almost every government in the world. The thematic mapping includes the analysis of 38 elements, but Management maintains that most are of no direct relevance to mineral exploration. It notes, however, that the mapping may be *"useful to mining companies to help orient their exploration activities,"* but *"even under ideal conditions,"* substantial investments in prospecting and exploration, as well as administrative approvals, would be necessary *"before mining development could actually take place in areas where it is permitted by law."*

10. Management claims that the thematic mapping conducted under the Project will not lead to mineral exploitation in the protected areas listed, even if a mineral deposit is eventually found. It points out that Ecuadorian law prohibits mineral exploitation in national patrimony protected areas, adding that *"thorough and complete environmental impact statements and consultation with the local community are required"* before any exploitation activity can be initiated in those protected areas where mining is permitted. It also claims that the Project is helping local authorities to strengthen their regulatory capacity as far as mining activities are concerned.
11. Management contends that the Requesters cannot demonstrate actual or potential direct harm to their rights or interests as a result of the thematic mapping because the part of the Intag Valley where they reside was not thematically mapped by the Project. The mapping of adjacent areas, in turn, which includes the Cotachi-Cayapas Ecological Reserve, would not threaten anyone's fundamental rights.
12. Management claims that consultations were adequate, that the consultation process related to the mapping activities has been enhanced since November 1999, and that further consultations will take place before the information gathered is eventually disclosed to the public in general.

Eligibility of the Request

13. The Panel reviewed the technical eligibility criteria applicable to a Request for Inspection, and agreed that they had all been met in the case of the present Request. Accordingly, it recommended an investigation into the matters alleged in the Request to the Board of Executive Directors. On May 15, 2000, the Board recorded its approval of the recommendation and authorized the Panel to conduct an investigation.

The Investigation Process

14. The Team that undertook the investigation comprised two Panel members, Maartje van Putten (leader of the Investigation) and Jim MacNeill (Chairman of the Panel). They were assisted by the Panel Secretariat and a team of consultants.

15. The Team interviewed Bank staff and consultants associated with the Project in Washington DC both before and after its field visit. In Ecuador, they interviewed Bank staff and met with Government officials, including staff of PRODEMINTA. They also met with the Requesters, officials of NGOs, representatives of several sectors of the Province of Imbabura's civil society, and directly affected people in village communities. It visited the area where the Requesters live, the remote Intag Valley and the buffer zone of the Cotacachi-Cayapas Ecological Reserve.
16. The amount of time required both to determine eligibility and investigate this Request for Inspection was unusually long. This was due mainly to two factors. First, the Panel's resources were to an important extent committed to working on Requests previously received. More importantly, however, the Panel did its utmost to accommodate the internal constraints and priorities of the Borrower. The Requesters and Management were continuously informed and, when required, consulted about the factors surrounding the resulting delays in the process.

Environmental Compliance

Applicable Environmental Assessment Policies

17. The Requesters claim a number of violations of OD 4.01 on Environmental Assessment. It should be noted, however, that the preparation of the Project spanned nearly three years and this coincided with the adoption by the Bank of a new Operational Directive on Environmental Assessment, OD 4.01, on October 3, 1991, replacing OD 4.00, Annex A, of October 1989. The Project was formally initiated in the Bank with the issuance of an Initial Executive Project Summary (IEPS) on April 9, 1990. It was appraised in December 1992 and approved by the Bank's Board of Directors on October 21, 1993. A draft EA Report was first prepared on June 30, 1991. A revised version was issued on November 24, 1992. The summary was circulated to the Board on January 7, 1993, and the EA Report was updated in February 1993.
18. In its introduction, OD 4.01 states that: "[t]he Directive shall apply to all projects for which IEPS were issued after October 1, 1991. Projects for which IEPSs have been issued before that date are subject to OD 4.00, Annex A, issued on October 31, 1989; for these projects, **the new provisions should be applied where appropriate and feasible.**" (Emphasis added). It appears reasonable, therefore, to conclude that, except during the IEPS stage, OD 4.01 was applicable to the Project.
19. Management does not seem to disagree with this view. In its Response to the Request, it states that: "*Management is of the opinion that the Project was prepared and appraised in complete compliance with OD 4.00, which was applicable at the time, as well as 4.01 (which is referred to in the Request).*" (Emphasis added) During interviews, the staff concerned stated that they had followed OD 4.01 during all the final and most critical junctures of Project preparation and implementation. In addition, a review of the files available to the Panel shows that most Project memoranda on the subject refer to OD 4.01.

Categorization of the Project

20. One of the most important decisions that Management must make concerning environmental assessment is the category of the assessment that will be undertaken. That decision essentially determines the scope of the assessment, its breadth and depth, and the time and resources made available to undertake it.
21. Paragraph 19 of Annex A of OD 4.00 states, among other requirements, that “[i]n the IEPS, the TM [Task Manager], in consultation with the RED [Regional Environment Department], should ... indicate the category (A-D) and the type of environmental analysis recommended....” A similar requirement is found in paragraph 1 of Annex E of OD 4.01. It states that: “[a]t identification and prior to the issuance of the Initial Executive Project Summary (IEPS), projects should be screened for environmental issues and assigned one of three categories A, B, or C.”
22. In its Response to the Request, Management confirms that the Project as a whole is classified as an “A” category Project. Interestingly, it adds that the “*nature of the other six sub-components, including thematic mapping, were not considered to merit classification “A”... While Bank staff should examine the entire Project as to its compliance with Bank policies, different components require different approaches.*”
23. The EA category assigned to the Project was not included in the IEPS issued on April 9, 1990, although the document points out the environmental risk posed by small-scale miners. The minutes of the IEPS meeting issued on April 27, 1990 devote a full paragraph to “*environmental aspects,*” but it is equally silent about the proposed Project’s environmental classification. The records made available to the Panel show that it was not until the Pre-Appraisal Review Meeting of November 16, 1992 that a classification was formally adopted by which time OD 4.01 was already in force.
24. The Panel recognizes that attributing different EA categories to different components of a project was not prohibited under OD 4.00, although it was under OD 4.01. Also, as discussed in Chapter 4 of this Report, it concludes that adverse environmental consequences resulting from the thematic mapping sub-component may be considered as remote. Given that a major objective of the Project was to promote mining activities in the entire country, the Panel nevertheless feels that a more expanded and robust EA process should have been undertaken. This would have enabled the Borrower and Bank Management to better understand and prepare for potential adverse impacts derived from the Project as a whole.
25. **The Panel notes that in order to meet the OD’s procedural requirements on EA categorization, the environmental category of the Project should have been determined and indicated in the Initial Executive Project Summary. The Panel finds, however, that assigning the Project with a Category “A” for environmental assessment purposes was in compliance with Bank policies on environmental assessment.**

Content of the EA

26. The Requesters claim that the EA did not include analyses or plans for mitigating environmental impacts on protected nature reserves, private reserves, endangered species, or communities living in the areas affected by the Project. In its Response, Management states that such analysis or plans are not required since the Project is not financing specific investments in these areas.
27. According to Bank policies set forth in OD 4.00, Annex A and OD 4.01, an EA covers “... *project specific and other environmental impacts in the area of influence of a project,*” for the purpose of ensuring “... *that the project options under consideration are environmentally sound and sustainable.*” Therefore, the Project’s environmental impact “... *should be recognized early in the project cycle and taken into account in the project selection, siting, planning and design.*” A project-specific EA should cover “*environmental baseline conditions...potential environmental impact, direct and indirect...environmental comparison of alternatives...preventive, mitigatory and compensatory measures...environmental management ... [and] monitoring.*” The ODs provide that regional and sectoral EAs “...*will have identified the relevant issues, collected much of the data, and, in general, greatly reduced the work needed in the project-specific EAs.*” The main elements of an EA that are relevant to the claims of the Requesters are reviewed below.

The Geographical Scope of the Environmental Assessment

28. A clear understanding of the spatial parameters of a project is, of course, fundamental to its proper assessment. There is a need to know what areas are involved and are likely to experience economic, social and environmental impacts in determining the scope of an environmental assessment.
29. An examination of the EA Report reveals that the north of Ecuador, and more particularly the biologically rich Cotacachi-Cayapas Ecological Reserve, is never mentioned. The scope of the EA appears to cover only the south of the country, focussing on the environmental and social impacts of existing small scale gold mining activities. Management’s Response to the Request appears to confirm this.
30. In addition, the EA Report does not appear to address the broader issue of the likely impact of increased mining activity in the country as a whole, including the North. Since two of the major objectives of the Project are to attract new mining investment and to arrest mining-related degradation, it is reasonable to assume that the development of new mines in areas where there may be a significant risk of environmental degradation was an expected consequence of the Project. This is recognized, at least indirectly, by the EA.
31. The limited scope of the Environmental Assessment in all of its versions often came up during interviews with staff. They recognized that, in spite of LATEN’s concerns discussed below, the EA was restricted to the South and that, during the design of the

Project and the first years of implementation, the Project's focus had been exclusively on the South and the social and environmental problems of illegal mining found there.

- 32. The Panel finds that in limiting the spatial/geographical scope of the Environmental Assessment in the manner described above, the Bank was not in compliance with the relevant provisions of OD 4.01 (and OD 4.00, Annex A.)**

Baseline Data

33. Baseline data are fundamental to any environmental assessment and Bank policies on environmental assessment requires that certain data be gathered for project-specific EA reports and this is recognized by the OD.
34. The Panel notes that the EA is written almost entirely from an abiotic environment point of view, focussing on the effects of pollution caused by artisanal mining activities. It does not address issues of the living environment; it does not cover the biological environment; and it is virtually silent on the extraordinarily rich biodiversity of Ecuador. Moreover, the EA does not elaborate on possible future negative impacts of the Project on the natural environment, caused in this case by potential future mining activities. In doing so, the EA appears to overlook the extensive scientific literature available at the time on various aspects of the Ecuadorian environment. These shortcomings in the EA were noted by Bank environmental specialists during Project preparation. (See paragraphs 39 and 40 below.)
- 35. The Panel finds that the Bank was not in compliance with the requirements of OD 4.01 concerning the provision of adequate baseline environmental data in the EA Report.**

Institutional and Legal Framework

36. OD 4.01 requires the EA to take into account, inter alia, the country's overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects. Consistent with this, the EA includes a chapter on "*Existing Policy, Administrative and Legal Framework*" that contains a summary review of environmental laws and regulations applicable to the mining sector and a brief description of its institutional set up and Ecuador's new mining legislative and policy framework.
- 37. The Panel finds that the EA Report's analysis of the institutional, policy and legal framework, although not comprehensive, was in compliance with relevant Bank policies as set forth in OD 4.01.**

Revisions and Approval of the EA.

38. The preparation of the EA is the responsibility of the Borrower. However, "*the Bank's Task Manager assists and monitors the EA process with support from the RED.*" OD 4.01 points out that "*the EA preparation should form part of the overall feasibility study or*

preparation work for the project” and that the “completion of the EA report is a prerequisite for the departure of the appraisal mission.” The EA preparation must include, inter alia, the project’s environmental screening and consultations with affected groups and NGOs. The EA preparation process is reviewed below.

39. OD 4.01 provides that the findings of the EA process and the procedures used in its preparation are to be summarized in the text of the Staff Appraisal Report (SAR) and in the Memorandum and Recommendation of the President (MOP). The summary should cover, “inter alia, ***environmental baseline conditions; ... the capability of environmental units and measures to strengthen them; ... revisions to the EA as a result of the appraisal; and the borrower’s consultations with affected groups and NGOs.***” (Emphasis added) The OD notes that these factors provide the basis for the RED’s (LATEN, the Regional Environment Division of LAC, in this case) formal environmental clearance, prior to the authorization of negotiations by the Regional Vice President. Since there was no SAR for this project, an Annex of the MOP should have summarized the EA of this category “A” project more fully.
40. The draft EA Report was reviewed by LATEN. On October 9 1992, prior to the November 16 Pre-Appraisal Meeting, LATEN recommended that the Environmental Assessment should indicate: (i) the extent to which project-induced mining expansion could damage ecologically sensitive areas; (ii) whether a clear legal and regulatory framework exists to prevent or strictly control mining concessions in wildland areas; and (iii) the specific environmental components and conditions to be incorporated within the project design to protect “*wildlands of special concern*,” as defined in the Bank’s Wildlands Policy.
41. In the same memorandum, LATEN further suggested that the Project could finance the development of a detailed map of those wildland areas (including legally protected areas such as National Parks and critical habitats of known endangered species) where new mining concessions would not be granted. In view of the exceptionally high biodiversity of Ecuador and the dramatic extent to which forest has been reduced in the past 50 years, this would have been a sensible approach and good practice. LATEN also advised that they believed that the report needed to be substantially strengthened in several key respects in order to comply with the Bank’s Operational Directive (OD) 4.01 on environmental assessment.
42. The EA process, however, continued in the form of independent studies. They added little to the assessment of the biological environment. In fact, during Project Appraisal, a co-financier of the Project commissioned consultants to undertake a separate “*fairly general overview*” of the Project “*from both the economic and environmental point of view.*” Their report includes a section on “*Realism of the Environmental Measures*” in which it is stated that, based on “*the quality of the environmental impact analysis of current mining activity, there was a general concern that the World Bank, although taking the environmental measures seriously, had not been adequately advised.*”

43. During a Pre-Appraisal meeting on January 28, 1993, LATEN raised a number of critical environmental issues. LATEN's comments covered a considerable array of important issues, many of them similar to those made on previous occasions.
44. On February 25, 1993, LATEN expressed sympathy with the lateness of their recommendations, but urged that all comments made at the Pre-Appraisal meeting be incorporated in the negotiations package. Other comments, it felt, should be incorporated to the extent possible. Given the advanced internal stage of Project preparation, it appears that LATEN's concerns were largely disregarded by the Project preparation team. On March 25, 1993, LATEN cleared the Project for negotiation. Later, on March 29, 1993, in a cover memorandum to the LAC Vice President seeking authorization to negotiate, it was stated that the *"recommendations and suggestions made by LATEN have been included."*
45. During interviews with the Panel, one of the Bank's environmental officers involved in Project preparation and specifically charged with addressing LATEN's concerns, acknowledged that these concerns were not addressed in the revised EA. He said that *"[t]here was a gaping hole in the revised EA – it must have been a mistake."* He also felt that the mapping overlays of Protected Areas should have been included in the revised EA.
46. **The Panel finds that several critical recommendations made by LATEN were not incorporated in the EA and subsequently reflected in the design and implementation of the Project. In the Panel's view, LATEN's recommendations were consistent with Bank policies and its clearance should have been issued only after it had received evidence that they had been appropriately incorporated.**
47. **Since the recommended revisions to the EA Report were not made to bring it into compliance with Bank policies, in the Panel's view, therefore, the Bank was not in compliance with paragraph 12 of OD 4.01.**

Consultation

48. The Requesters alleged that *"[t]he EA was drawn up without the participation of the communities and NGOs involved and without taking their opinions into account,"* and that *"the PRODEMICA neglected several points,"* including that *"it failed to consult local communities and NGOs, as well as regional authorities and coordination entities."*
49. Management denies that the consultation process was not adequate. It contends that local authorities or community representatives were contacted before initiating the mapping sub-component and before entering the areas to be mapped. It provides a list of *"information meetings"* conducted with local communities, including a list of meetings in the Imbabura Province.
50. Management states that before going into an area to be mapped, it was standard practice *"to inform"* the population living in the areas *"where investigations, including thematic*

mapping, are intended to be carried out.” As a result of these meetings, Management contends, the Project was able to take into account the views expressed in planning the mapping work. By way of example, it states that a meeting was held directly with the communities in the Intag Valley. Such a meeting was held in the Intag Area on April 4, 1998 and, as a result of it, Project management took the decision to exempt the Valley area from the survey (See Map). It should be noted, however, that other sources informed the Panel that existing mineral data made the mapping of this area unnecessary.

51. Finally, Management advises that in November 1999, after the information needed for the thematic maps had been collected and processed (i.e., a month before the Request for Inspection was received): *“a number of enhancements to the consultation process related to thematic mapping were introduced.”*
52. The facts indeed confirm that, contrary to the requirements of the OD, the northern part of the country was neglected during the EA process. The OD requires that consultations should occur shortly after the EA category has been assigned, and once a draft EA has been prepared. According to the facts provided by Management in a *“sample list of information meetings conducted with local communities,”* meetings in the Imbabura Province did not commence until March 5, 1998, five years after the EA was completed. (In fact, it appears from Management’s Response to the Request that consultations did not commence in the rest of the country before May 1996.) It is worth noting that Management does not characterize these as meetings *“to consult”* but rather as meetings *“to inform.”*
53. It appears that during the design, preparation, and initial execution of the Project, Management was occupied with the challenges posed by the situation in the south, where the main problems and opportunities were seen to exist. During interviews, Bank staff repeatedly affirmed that it did not occur to them that the geo-information sub-component of the Project, and more specifically the release of a CD-ROM with geochemical data, could and would be seen to pose a serious risk to the Cotacachi-Cayapas Ecological Reserve and to the well-being of the residents and communities of the Intag Valley.
54. During its investigation the Panel was confronted repeatedly with a strongly expressed fear that the Project’s geo-information activities would lead to mining in the Region surrounding the Cotacachi-Cayapas Ecological Reserve. This fear was expressed not only by representatives of residents of the Intag Area, but also by the Mayor, councilors and residents of the town of Cotacachi and by leaders of several NGO’s in Quito who met with the Panel. Although it is obviously hard to estimate the percentage of the population in the Intag Area and the town of Cotacachi who shared these fears and concerns, it was clearly a substantial number.
55. During its Town Hall meeting with the Mayor Auki Tituana Males, Councillors and residents of Cotacachi, the Inspection Team heard representatives of different groups from civil society express their fear that the publication of maps and the CD-ROM would lead to mining around and even in the Cotacachi-Cayapas Ecological Reserve, with a range of negative consequences for their communities. The Mayor presented the Panel

with copies of two documents related to this fear: a Municipal Resolution declaring the Cotacachi Canton an Ecological Zone, and Minutes containing the Resolutions of the Fifth Cantonal Unit Assembly of September 13-15, 2000. Of significant relevance to this Project is Resolution 17 of the Minutes that states that *"the Assembly demands from the Ministry of Environment and the Ministry of Energy and Mines that dissemination of PRODEMINCA's Mining information about the Cotacachi-Coyapas Ecological Reserve and the [Cotacachi] Canton in general be stopped."* A day later, at a meeting with the Inspection Team, in Apuela, a small town in the Intag Valley, about 40 representatives of different community based organizations expressed similar fears.

56. During these meetings, it became evident that part of the information on which the local people based their opinions, was in fact misinformation. Some people, for example, had the impression that PRODEMINCA was a mining company. Some did not know that parts of the Intag Valley would not be mapped. Others were *"convinced"* that PRODEMINCA was producing detailed maps that easily could lead to an *"invasion"* of illegal or artisanal miners. No one, of course, had seen the maps, nor had the CD-ROMs properly explained to them. People at these meetings spoke about their experience with exploration activities around a mine site in the Junín area, where a mining company was forcibly removed by elements of the community. This traumatic event engendered fear and, the Panel was informed, caused severe problems in the community between those that were employed by the company and those that were against mining activities in the Valley.
57. In the Panel's view, a program of consultation undertaken shortly after a draft EA had been prepared, as required by the OD, could have addressed the legitimate needs of potentially affected people for information about the Project. Conducted in the spirit of the OD, it could have led to a better understanding about what was intended, allayed latent fears, and provided feedback that would have improved the Project and increased community cooperation in implementing it.
58. **On the basis of the above, the Panel finds that the Bank was not in compliance with the requirements of OD 4.01 concerning consultation during the preparation of the Project.**
59. **However, the Panel commends the November 1999 initiative to strengthen and enhance, however late, the consultation process related to geo-information and thematic mapping.**

Thematic Mapping and Natural Habitats

60. The Requesters claim that the Bank has transgressed its own policies and procedures by supporting a project that will *"involve the significant conversion or degradation of critical natural habitats."* The relevant Bank policy referred to here is OPN 11.02, Wildlands, of June 2, 1986. The policy states that *"The Bank's general policy regarding wildlands is to seek to avoid their elimination and rather to assist in their preservation."*

Specifically, (1) the Bank normally declines to finance project involving conversion of wildlands of special concern (as defined in Section 2.3)...”

61. The Requesters further claim that *“even in the prospecting phase of the PRODEMINCA project damage has already been done to the areas mentioned by paths being opened up for personnel engaged in prospecting and then being used by people who have nothing to do with the project as access route to the Cotacachi-Cayapas Ecological Reserve.”* (Based on Art. 18 (a) of the Mining Law, the Requesters claim that the Project’s geo-information activities constitute mineral prospecting. The law defines “prospecting” as the search for traces of new mineral areas.)
62. The Request also claims that the Bank has also transgressed *“Ecuadorian laws by fostering activities prohibited by domestic law and paragraph 14 of the World Bank’s OD 4.01, which states that both the Borrower and the Bank should use common sense when applying EA procedures, in order to ensure that project design and execution are satisfactory from every point of view, both environmental and economic, and that they conform to the laws, policies, and procedures of the borrower.”*
63. In addition, the Requesters contend that the Bank failed to take into account the possible impact of divulging the information contained in the thematic mineral maps. They claim that *“the information gathered in protected areas, public or private, including its buffer zones, and areas which conflicts have arisen between communities and mining companies, not be made public.”*
64. Management does not dispute the fact that the area contains unique biodiversity (although the EA does not refer to this) but argues that OPN 11.02 *“is not applicable to this Project because of the objectives of the Project was not to convert wildlands into intensive land and water uses. The Project is primarily a technical assistance project. The thematic activities themselves do not have any physical impact on the environment in general or on the wildlands/natural habitats in particular.”* On its face, this could be regarded as a very narrow interpretation of the Bank’s policy on wildlands of special concern and fails to take into account the *overall* aim of the Project which is to increase the amount of mining in the country, and which, if successful, will lead to an increase of the area of land (and any vegetation cover and biodiversity contained in it) that is converted, modified, damaged or contaminated.
65. Management’s Response added that the *“thematic mapping conducted by the Project in no way causes, or has caused, ecological damage to the protected areas, nor does it affect potable water resources or endanger wildlife or natural habitats. Management shares the view of the Requestors that the Cotacachi-Cayapas Ecological Reserve is a precious area of bio-diversity that requires special care and attention.”* and that *“because of its unique bio-diversity, special care was taken during the mapping activities not to disturb the unique flora and fauna. Teams were brought in by helicopter so as to avoid the need to cut pathways through the forest. When overland travel was necessary, river and stream channels were followed for the same reasons. No chemicals or noxious substances were used in the research...”*

66. Management contends that, in any event, the potential consequence of releasing the information is a matter of speculation and that, in any case, the authority and responsibility for publishing the information rests with the Government of Ecuador and not with the Bank.
67. In several paragraphs of the Response, Management contends that protected areas, and specifically the Cotacachi-Cayapas Ecological Reserve, were included under the thematic mapping component because there was a seemingly absolute prohibition of mining activities in these areas established by Art. 87 of the Mining Law and its Regulation. For example, paragraph 10 states that “[i]n the case of this Project, **as an outcome of the appraisal mission**, it was specifically decided to thematically map protected areas, even though mining **would not legally be permitted in those areas**, precisely because of the environmental data such mapping would generate and the fact that it could be done at nominal marginal cost.” (Emphasis added).
68. The MOP, however, when describing the “Criteria for Granting Concessions...” after referring to Art. 87 of the Mining Law, states that “mining is not permitted within the National Forest Patrimony and protected areas, nor in zones adjacent to or less than 50 km from international boundaries (**although the law establishes specific procedures and requirements to allow mining in such areas under special circumstances**).” (Emphasis added)
69. To the Requesters’ claim that the PRODEMINCA Project would violate their security and their constitutional right to live in an “*ecologically balanced environment guaranteeing sustainable development*,” Management responded that such an argument, inter alia, “ignores the Ecuadorian environmental regulations, which prohibit mining in protected areas.”
70. After the Response was submitted to the Panel, Art. 87 of the Mining Law was repealed as part of a number of amendments to the Law. Both the Requesters and Management made several submissions to the Panel about this. In short, the Requesters stated that the repeal of Art. 87 was an outcome of the PRODEMINCA Project that showed the Government and Bank’s intention to open protected areas to mining activities. Management assured the Panel that the prohibition of mining in protected areas continues in force because the Environmental Regulations for Mining Activities still “*clearly prohibit*” mining activities in protected areas and because there are other laws, especially the “*Ley de Gestion Ambiental*” (Environmental Management Law) which would contain similar provisions.
71. In fact, the Environmental Management Law provides that “*the rational exploitation of non-renewable natural resources within the State’s natural protected areas and fragile ecosystems*,” as dictated by the national interests “**may take place by exception**” and only after an economic feasibility study and an assessment of environmental impacts have been carried out.

72. The Panel is of the opinion that Management has failed to demonstrate its claim that, **for legal reasons alone**, it would not be possible to use the information produced under the Geo-information component to initiate mining activities in protected areas. There is no doubt that Ecuador's legislation has established a number of severe restrictions and conditions for any possible exploitation of non-renewable resources in protected areas, but these do not add up to the existence of an absolute legal prohibition of mining activities in these areas as Management suggests. The Panel wishes to note, however, that during its visit to Quito, Cabinet level officials of the Ministries of Environment and Mines and Energy expressed the Government's commitment to prohibit any mining activities in protected areas.
73. **The Panel did not find any evidence to support the Requesters claim concerning Management's alleged acquiescence to the repeal of Art. 87 of the Mining Law. On the contrary, the record shows that Management has, on several occasions, expressed to the Government its concerns regarding the real or perceived consequences of the repeal of Art. 87.**
74. **The Panel, however, did not receive any evidence to support the Requesters' claim that the Cotacachi-Cayapas reserve suffered substantial or permanent damage as a result of the sampling activities carried out under the Project.**

Relationship between Thematic Mapping and Mining

75. The relationship between thematic mapping and legal and illegal mining was studied carefully by the Panel and investigated during its field mission in October 2000. This was a challenging undertaking, since any possible linkage between the release of information generated by the Project, the actual use of such information with adverse environmental consequences, and Bank's fiduciary responsibility vis-à-vis its safeguard policies, is not at all direct or clear.
76. The Panel discussed the issue with several geological and mining experts and received a submission by an Italian NGO on the subject. In addition, given the highly technical nature of the issues involved, the Panel felt that it was desirable to retain the services of an independent consultant with substantial expertise on geological and mining matters, and to ask her to consider the Requesters claim that the release of the maps would attract mining companies and produce multifold negative impacts on their society and the local environment.
77. Having considered this expert advice, and examined the evidence, it seems reasonable to conclude that the maps alone, even in conjunction with the geochemical data, are insufficient in themselves to locate ore deposits. The geochemical data and the geologic maps would be useful reconnaissance tools in narrowing the search area for further exploration, especially when used in conjunction with other available maps, papers, and reports, but they should not lead directly to mining activity.

78. As for the release of the CD-ROMs, another concern of the Requesters, the data provided are insufficient for locating an ore deposit but, again, they may help narrow the search area for more detailed exploration. In other words, the geochemical data and maps are a good starting point for further studies of the mineral potential of this region of Ecuador, but any interested company would have to do much more work, primarily detailed mapping and drilling, before any detailed exploration could begin. This would take considerable time and may cost millions of dollars.
79. During its field visits, the Panel encountered a wide range of views concerning the probability that the release of the information would lead to an influx of illegal, artisanal miners. They ranged from almost certainty that it would, to grave doubt that it would have any effect at all. Several of those interviewed, including some NGOs, made the point that even without the information contained in the CD-ROMs being released, mining might take place anywhere in the country.
80. On the issue of environmental degradation and loss of natural habitats, another concern of the Requesters, any mining activities involving the extraction of deposits of gold, copper, lead, and zinc, or non-metallic industrial and construction minerals, can lead to environmental degradation if proper safeguards are not taken. While modern mining methods can minimize the environmental impact, their use often depends on laws and how they are enforced. Lax standards and poor oversight can lead to serious environmental problems.
81. In addition to the maps and CD-ROMs, PRODEMINCA published in June 2000 a Manual of Exploration of Metalliferous Deposits in Ecuador and a series of five volumes entitled Evaluation of Mining Districts of Ecuador. The information provided is intended to enable mining companies to optimize exploration strategies and select new potential targets for metalliferous mineralization. While of great interest, it appears that this and other mining data that may exist and that could supplement the Project-generated data, such as the GIS Andes Project, would not increase the likelihood of mining activities in the area. The best advice indicates that, while the GIS Andes Project is one of the best data repositories for Andean geology, it is lacking in much information for Ecuador and the data are intended for regional geologic studies.
82. It should be noted also that PRODEMINCA's draft standard license agreements lay down strict conditions regarding the use and release of the CD-ROMs' information. Further, just prior to the Panel's October 2000 field visit, the Ministry of Energy and Mines and the Ministry of the Environment, in an Interministerial Agreement, established, *inter alia*, a mechanism that includes the participation of NGOs and/or private sector enterprises in the monitoring of the use and application of the information generated under the Project. The Panel views this as a very positive development.
83. While the release of the CD-ROM and related materials on thematic mapping may assist both legal and illegal mining enterprises in deciding on whether or not to initiate operations in the Cotacachi-Cayapas area (or elsewhere in Ecuador), the probability that the release alone would lead to actual mining must thus be regarded as very small. In any

event, both legal and illegal mining could in principle emerge in any part of Ecuador with or without the information contained in the CD-ROM or the other information produced under the Project. In this regard, the Panel was informed that mineral and geological data about the Intag Area is already available as a result of prior mining prospecting activities in Junin.

84. The eventuality that the Project may come to cause harm (i.e. material adverse effects) to the Requesters is, in all likelihood, very remote. First, the Requesters reside in an area that has been excluded from the thematic mapping sub-component of the Project (see Map) and, hence, no mining activity in the area could be regarded as a direct consequence of the Project. Second, Ecuador's legislation only permits mining activities in protected areas (such as the Cotachachi-Cayapas Ecological Reserve) by exception. Even when permitted, these activities are subject to strict environmental controls. In meetings with the Panel, the Government of Ecuador's mining and environmental authorities confirmed their commitment to prohibit any kind of mining activities in protected areas. Finally, officials of local Government in Ecuador (such as the Municipality of Cotacachi), representatives of civil society and local (such as DECOIN and CEDENMA) and international NGOs appear firmly committed to protect Ecuador's very rich biodiversity. In a positive sense, the present Request for Inspection is an example of this commitment.
85. **The Panel accepts that the geological and thematic mapping carried out under the Project is ecologically neutral and agrees that thematic mapping is generally beneficial for the country, as it increases its database of knowledge on its natural resources. It will also help identify areas that are sensitive and that could be excluded from mining development. As with any type of information with economic value, however, this must be carefully managed so as not to generate adverse social and environmental consequences.**
86. **Concerning the allegations of the Requesters, on the basis of the foregoing, the Panel finds the Bank in compliance with OPN 11.02.**

Project Supervision

87. The Requesters claim the Bank is not in compliance with OD 13.05 on Project Supervision. In their view, *"...the Bank has not monitored the PRODEMINCA project carefully enough, and that lack of control and surveillance has done harm to the parties involved (OD 13.05)."*
88. Management rejected the Requesters claims. In its Response, it stated that it *"...is of the opinion that supervision has been carried out in compliance with OD 13.05 from Project inception. The Bank task team has supervised the Project through frequent supervision missions, in many cases involving field visits, and in-depth evaluations at annual review meetings with participation of co-financiers and other agencies involved in Project implementation; as well as through continuous written, verbal and electronic mail exchanges with authorities, Project Staff and consultants."*

89. OD 13.05 states that “[p]roject supervision is one of the Bank’s most important activities.” It adds that the “ main purposes [of project supervision] are, *inter alia*, to identify problems promptly as they arise during implementation and help the borrower resolve them, and to modify as necessary the project concept and design as the project evolves during implementation or as circumstances change (in this context, Bank supervision complements the borrower's implementation efforts and is one of the most effective ways in which the Bank provides technical assistance to its borrowers).”

90. The Panel reviewed the Project files it received and several documents concerning the supervision the Project. The Panel also obtained valuable information concerning the supervision missions in discussions with Bank and Government officials. Accordingly, the Panel found that frequent missions were undertaken and that there was considerable follow up by the Bank on outstanding issues. Moreover, it appears that the composition and scope of the missions evolved with Project requirements.

91. On the basis of the evidence reviewed, the Panel finds the Bank in compliance with OD 13.05.

Summary of Findings

In summary, this Report concludes that Management is substantially in compliance with the provisions of OD 4.01 on Environmental Assessment (formerly OD 4.00, Annex A) except as noted below; OPN 11.02 on Wildlands (now OP/BP 4.04 on Natural Habitats), and OD 13.05 on Project Supervision. The Panel finds, however, that Management was in apparent violation of certain provisions of the policies and procedures on Environmental Assessment (OD 4.00, Annex A and OD 4.01) concerning processing, geographical scope, baseline data, and concerning consultation during preparation.

Part One

Introduction

Chapter 1

THE ECUADOR MINING DEVELOPMENT AND ENVIRONMENTAL CONTROL TECHNICAL ASSISTANCE PROJECT (PRODEMINCA)

1. Industrialized mining is relatively new in Ecuador. The Portovelo mine in Zaruma, El Oro Province, was developed around 1880 with British, and later American, financing, but until the 1990s, represented one of the few mechanized operations in the country. In 1991 the mine was closed due to its significant inefficiencies and persistent financial losses. Informal miners began invading the abandoned shafts, extracting ore without due regard to the environment.³
2. The President's Memorandum on the Project (MOP)⁴ states that, despite pre-colonial and Spanish mining activity in the country, until the early nineties “*the Government of Ecuador did not have mining on its agenda as a priority,*” and mining contributed “*less than one percent of the country's GDP and export revenues.*” Historically, the country's development and growth has come from external markets; and the Government's attention was focused on exporting bananas, shrimp and petroleum. However, faced with the effects of an economic crisis in the late 1980s that caused widespread poverty and deteriorating social conditions, the Government sought new ways of generating revenues that would relieve the poverty. Developments in neighboring countries, such as Chile and Peru, demonstrated that the mining sector could be an important source of employment and fiscal revenues.
3. In 1988, with the assistance of the World Bank and the development agencies of the UK and Sweden,⁵ the Government of Ecuador began preparing a project to modernize the mining sector. At the time, the country had a large number of so-called ‘artisanal’ or small-scale informal miners. Estimates of their number ranged from 20 to 40 thousand. These miners, who had no mining rights, were concentrated mainly in the southeastern part of the country. Some worked individually and others in groups as artisans. Often entire families would work the mines for firms owned by Ecuadorian businessmen. The high proportion of artisanal miners among the area's population caused severe imbalances in the local society and made these communities extremely sensitive to fluctuations in gold prices. The miners and the broader communities were also exposed directly to contaminants generated in gold extraction and recuperation –

³ Memorandum and Recommendation of the President of the International Bank for Reconstruction and Development to the Executive Directors on a Proposed Loan in an Amount Equivalent to US\$ 14 million to Ecuador for a Mining Development and Environmental Control Technical Assistance Project (September 22, 1993) (MOP) at Annex 1 & 2.

⁴Ibid.

⁵ ODA (now DFID) from the United Kingdom and SIDA from Sweden.

mainly mercury, but including cyanide. Miners were also affected by silica dust and toxic gases in the mines.⁶

1.1 The Project

4. The Ecuador Mining Development and Environmental Control Technical Assistance Project (PRODEMINCA)⁷ (the Project) was identified in September 1989. It was prepared by the Government from 1990 to 1992, with assistance from the Bank and the Swedish Government. It was appraised in December 1992. The Project comprises three major components: Sector Policy Management (US\$ 2.8 million); Policy Implementation (total US\$ 18.3 million); and Project Coordination (US\$ 0.8 million).⁸ The Policy Implementation component, in turn, comprises three parts: Mining and Environmental Health; Management of Mining Rights, and Geo-information.
5. A US\$ 14 million equivalent loan for the Project was approved by the Bank's Board of Executive Directors on October 21, 1993.⁹ The Loan Agreement was signed on March 8, 1994 and became effective on July 14, 1994. The Project's original closing date of June 30, 1999 was extended by the Bank to June 30, 2000 and December 31, 2000.
6. According to the MOP, the two major objectives of the *Project* "are to: (a) attract new private mining investment and support the systematic development of increased, yet environmentally sound, mineral production; and (b) arrest mining-related environmental degradation and mitigate the damage that results from the use of primitive and inadequate technology by informal miners."¹⁰
7. In the Panel's view, there appears to have been an evolution in emphasis toward the environmental dimensions of the Project since it was submitted to the Board in September 1993. Management points out that "Since 1995, emphasis has also been given to the improvement of socio-economic impacts of mining on local communities, more particularly within the small scale mining areas of south west Ecuador."¹¹ This evolution appears to have accelerated significantly after the Request was received. This emerged in a number of discussions during the course of the investigation. It is also reflected in the commissioning by PRODEMINCA of the report *La Geoquímica y las ciencia de la tierra como parte de la planificación del uso del suelo* and the

⁶ Lars Lander, *Preparative Studies for Mine Development and Environmental Control in Ecuador*, Study No. 2, Vol.1, *Environmental Impact Measures for Environmental Control*, June 30, 1991, at § B (1).

⁷ Spanish acronym for "Proyecto de Desarrollo Minero y Control Ambiental".

⁸ Management Response to Request for Inspection dated January 18, 2000 (hereinafter "Management Response" or "Response"), at § 8.

⁹ After cancellation of US\$ 3 million in November 1998, the total amount of the IBRD loan was US\$ 11 million equivalent. Co-financing in the amount of US\$ 4.0 million equivalent and US\$ 4.7 million equivalent was provided by the United Kingdom ODA (now DFID) and the Swedish BITS (now integrated into SIDA), respectively. The counterpart contribution from the Government of Ecuador (GOE) was US\$ 1.9 million equivalent.

¹⁰ MOP, *supra* note 1, at § 7.

¹¹ Response, *supra* note 6 at § 7.

series of publications on the evaluation of mining districts issued by PRODEMINCA subsequent to the Request.¹²

8. **The Request concerns claims about the social and environmental consequences of the first three sub-components of the Geo-information part of the Project.** These sub-components are Geological Sheet Mapping, Thematic Mapping, and Assessment of Ore Districts. A fourth sub-component, Mining Information Systems, is not relevant to the Request. The MOP makes it clear that the first three sub-components are all closely interrelated. They cover the area shown on the Map's inset, running through Ecuador's Western Cordillera from north, near the border with Colombia, to south, near the border with Peru.
9. **Geological Sheet Mapping.** The MOP states that the regular publication of basic geological maps is an essential service. In its view, Geological Sheet Mapping must be provided by governments to attract foreign investment to mining activities, as well as to provide cross-sectional information for government use (for public works, agriculture, etc.) and for the community at large. Accordingly, this sub-component is designed inter alia; *"to support the systematic geological mapping of previously inadequately mapped areas of the country and to publish professional quality packages of data and maps"* and *"...attract private exploration investment by helping companies to identify areas of detailed exploration programs."*¹³ This sub-component included the production of five 1:250,000 scale maps over the Western Cordillera between 1° North and 4° South, covering some 28,000 km² or 30-40 percent of the prospective areas of the country.¹⁴
10. **Thematic Mapping.** The MOP recognized, however, that more than basic geological information was required *"to develop a specific data base for use by the minerals industry. The thematic mapping work ... is aimed at producing interpretations for different data sets, to be published and made available in maps and descriptive and interpretative formats. Data sets to be developed and integrated would include analysis of satellite imagery (remote sensing), aerial photography, geological information, structure, mineralization, geochemistry, geophysics etc., with key areas being subject to field checking."* The MOP also stated that over the last decade developments in computer hardware and software had made it possible to allow

¹² Assessment of Ore Districts from Ecuador. Manual of Exploration of Metalliferous Deposits in Ecuador. (English and Spanish versions together). BGS/PRODEMINCA, Quito, June 2000. Evaluación de Distritos Mineros del Ecuador. Vol. 1: Potencial Minero Metálico y Guías de Exploración (Assessment of Ore Districts from Ecuador. Vol. 1: Metallic Mining Potential and Exploration Guides). PRODEMINCA, Quito, June 2000. Vol. 2: Depósitos Epitermales en la Cordillera Andina. (Epithermal Deposits in the Andean Cordillera of Ecuador). BGS/PRODEMINCA, Quito, June 2000. Vol. 3: Sulfuros Masivos Alojados en Volcanitas. (Volcanic-hosted Massive Sulphides). BGS/PRODEMINCA, Quito, June 2000. Vol. 4: Depósitos Porfídicos y Epi-Mesotermales Relacionados con Intrusiones de las Cordilleras Occidental y Real. (Porphyry Deposits and Epi-mesothermal Systems Related to Intrusions in the Cordilleras Occidental and Real). BGS/ PRODEMINCA Quito, June 2000. Vol. 5: Depósitos Porfídicos y Epi-mesotermales Relacionados con Intrusiones de la Cordillera El Condor. (Porphyry deposits and Epi-mesothermal Systems Related to Intrusions in the Cordillera El Condor). BGS/PRODEMINCA, Quito, June 2000.

¹³ MOP, *supra* note 1, Annex 2, at § 18.

¹⁴ *Ibid.*

digitized data-set manipulation that was being used as “a powerful tool in the petroleum and mining industries” and that results of this work would “provide guidance as to geological terrenes which are prospective for the discovery of ore deposits.” Finally, the MOP added that “additions to this data-set management work can eventually include infrastructure, surface waters, landslides, natural hazards, environmental data — including overlaps of natural and indigenous reserves — etc., for multi-disciplinary usage.”¹⁵ This sub-component included the production of at least five geological map sheets produced at a scale of 1:250,000 covering areas in the Western Cordillera between 1° North and 4° South.

11. **Assessment of Ore Districts.** *“The work programmed under this sub-component ... is aimed at the detailed analysis of known ore-districts . Detailed geological, mineralogical, geochemical and structural work permits the classification of ore-body models.”*¹⁶ The two main goals of this sub-component were “the definition of ore-body genesis and the investigation of new specific areas of interest.”¹⁷ The MOP stated that “the model of deposit genesis” developed under this sub-component would have a close linkage with the other sub-components of the Geo-information category and should be of “great help to private companies seeking to invest in exploration.”¹⁸

¹⁵ Id., at § 19.

¹⁶ Id., at § 20.

¹⁷ Ibid.

¹⁸ Ibid.

Chapter 2

The Request for Inspection

2.1 The Request

12. On December 13 1999, the Panel received a Request for Inspection¹⁹ (the Request) related to the Intag Area, which, on the Map, is shown immediately south of the Cotacachi-Cayapas Ecological Reserve. The Request was submitted by DECOIN (*Defensa y Conservación Ecológica de Intag* or Conservation and Ecological Defense of Intag), an Ecuadorian NGO, acting for and on behalf of persons living in the “Intag Area” and four representatives of the “*Asociación de Caficultores Rio Intag*” (Association of the Coffee Growers of Rio Intag) (The Requesters).



Figure 1: Intag Valley with the village of Apuela to the right.

13. The Requesters claim that the communities they represent are likely to suffer material harm as a result of failures and omissions by the Bank in the design and implementation of the Project. In particular, they claim that the public release of maps

¹⁹ DECOIN et al.; Request for Inspection: ECUADOR: Mining Development and Environmental Control Technical Assistance Project (Loan No. 3655-EC) received by the Panel on December 13, 1999 (hereinafter “The Request for Inspection” or “Request”).

with mineral data collected under the Project's Geo-information component will attract mining companies and "informal" miners.



Figure 2: Stream flowing into the Intag Valley from Cotacachi-Cayapas Reserve.



Figure 3: Border of the Cotacachi-Cayapas Ecological Reserve.

14. The Requesters claim that the development of mining activities in the Intag and surrounding areas, especially the Cotacachi-Cayapas Ecological Reserve would, in general, threaten biodiversity in the area where they live, and have a destructive impact on protected areas and their buffer zones, which constitute critical natural habitats; they add that *"these protected areas and their buffer zones provide a number of very important environmental goods and services for the inhabitants. Hundreds of rivers and streams have their source in these areas and the forests protect the water for human use and farming. The natural forests in these areas play an essential part in regulating the climate and providing enough humidity and rain for farming and animal husbandry."*²⁰ More specifically they claim that this would prevent local communities from continuing to work on their traditional farming, livestock and ecotourism activities, which are a major source of sustainable development and income in the region.²¹ They claim further that it would trigger grave social problems within their communities, such as prostitution, alcoholism and delinquency, caused by invasions of settlers, mineworkers, and informal miners.²²
15. The Requesters maintain that mining activities in these areas would be unavoidable should the geo-information maps and data reveal the existence of mining potential in the region. They claim that mining activities would result in significant conversion or

²⁰ Id., at § 3.

²¹ Id., at § 5(I).

²² Id., at § 5(II).

degradation of areas designated as critical natural habitats, and would constitute a violation of specific Bank policies and procedures. As examples of critical habitats, they mention the ecosystem of El Chocó and the Cotacachi-Cayapas Ecological Reserve. The latter is recognized as one of the world's richest remaining natural habitats and one of the threatened biodiversity hotspots. To substantiate this statement, the Requesters provided letters issued inter alia by the IUCN – The World Conservation Union, the Ecuadorian Ecological Studies Foundation (ECOCIENCIA), and from Professor Edward O. Wilson, Honorary Curator of the Museum of Comparative Zoology, Cambridge Mass.²³

16. The Requesters also state that “[i]n practice, PRODEMINCA is carrying out minerals prospecting activities by conducting surveys of mining potential in different parts of the country. Although, in principle, prospecting is a necessary part of this branch of industry, it will pose a serious threat to the critical natural habitats in which we live...”²⁴
17. The Requesters state that the Bank failed to achieve the standards imposed by its own policies and procedures regarding the preparation of an environmental assessment. According to them, the fact that the Project was screened as category “A” means that it is likely to have significant impact and, therefore, requires a rigorous environmental assessment. These requirements, they state, were not fully met. More specifically, the Requesters allege that Management:
 - a) failed to consult and take into account the views of local communities and NGOs in preparing the environmental assessment;
 - b) failed to consider endangered ecosystems;
 - c) failed to take into account the possible impact of divulging the information contained in the mineral maps;
 - d) failed to assess the institutional ability of mining authorities to protect the areas from possible invasions of “informal” miners;
 - e) failed to assess the Project’s impact on ecosystems in northwestern Ecuador, focusing rather on the southern areas, on “totally different” ecosystems; and
 - g) failed to conform with Ecuadorian laws.
18. The Requesters also state that: “[d]issemination of information compiled and systematized by the PRODEMINCA project on the natural and protected areas in our surroundings will seriously threaten their stability.”²⁵

²³ Id., at Annexes 2, 3 and 4.

²⁴ Id., at § 1. See also *infra* note 125.

²⁵ Id., at § 3.

19. The Requesters add that: “[o]ur interests as organizations concerned with both the environment and sustainable agricultural development are to conserve the forests and biodiversity that still exist, to avoid overall degradation of the environment, including pollution of our rivers and drinking water sources, and to safeguard the quality of that resource. We also support sustainable development projects, in particular in agriculture, animal husbandry and ecological tourism, and we are concerned to safeguard public safety and communal peace.”²⁶
20. Finally, the Requesters claim that: “...the Bank has not monitored the PRODEMICA Project carefully enough, and that lack of control and surveillance has done harm to the parties involved.”²⁷

2.2. Registration of the Request

21. On December 17, 1999, the Inspection Panel registered the Request for Inspection noting that the Requesters’ allegations could constitute violations of, inter alia, the following Bank Policies and Procedures: OD 4.01 on Environmental Assessment; OPN 11.02 on Wildlands (now OP/BP 4.04 on Natural Habitats); and OD 13.05 on Project Supervision.

2.3. Management’s Response

22. On January 18, 2000, the Panel received the Management Response to the Request for Inspection (the Response). Bank Management is of the view that it has complied with all operational policies and procedures applicable to the matters raised by the Request.
23. Initially, Management notes that “[w]hile the Request for Inspection addresses various concerns, they all relate to the thematic mapping [geo-information] sub-component of... the Project...,” thereby concluding that “[t]he execution of other components of the Project is not the subject of the Request.”²⁸
24. Management states that the kind of mapping being used in the Project, namely a broad regional scale of 1:200,000,²⁹ “...is internationally recognized as a legitimate and basic, environmentally neutral, activity that is conducted by almost every government in the world.” It claims that “[m]ost governments include national parks and protected areas in such regional thematic mapping surveys as a means of establishing environmental baseline data, even though mining is not permitted in these areas.”³⁰ Management claims further that the thematic mapping conducted by the Project is fully consistent with international initiatives coordinated by the

²⁶ Ibid.

²⁷ Id., at § 4(IV).

²⁸ Response, *supra* note 6, at § 9.

²⁹ In a footnote, Management explains that “Originally, mapping on a scale of 1:250,000 and 1:100,000 was contemplated. In practice, all the thematic mapping is being carried out on a scale of 1:200,000. The difference of scale is immaterial for purposes of the Request.” Id., at footnote 3.

³⁰ Id., at § 10.

UNESCO, the International Union of Geological Sciences and other specialized agencies.

25. Management states that, in this Project, the thematic mapping will include the analysis of 38 elements, *"most of no direct relevance to mineral exploration."*³¹ It defends such mapping claiming that it is not mineral prospecting. It concedes, however, that the mapping may be *"useful to mining companies to help orient their exploration activities."* Nevertheless, it maintains that *"even under ideal conditions,"* substantial investments in prospecting and exploration, as well as legal and administrative clearance, would be necessary *"before mining development could actually take place in areas where it is permitted by law."*³²
26. In any event, Management contends, the Requesters cannot demonstrate actual or potential direct harm to their rights or interests as a result of the thematic mapping because the part of the Intag Valley where they reside was not thematically mapped by the Project. The mapping of adjacent areas, in turn, which includes the Cotacachi-Cayapas Ecological Reserve, would not threaten anyone's fundamental rights.³³
27. Management maintains that the concerns raised by the Requesters are based on suppositions that it believes to be erroneous; namely, *"that (i) earth science reconnaissance is equivalent to mineral prospecting, and leads directly and inevitably to mining and (ii) mining, would necessarily be inimical to traditional livelihoods in areas where it takes place."*³⁴
28. Regarding the first supposition, Management asserts that the type of mapping being used in Ecuador is not designed to find or prospect directly for mineral deposits. According to Management, *"[s]imilar thematic mapping and geo-chemical reconnaissance have previously been undertaken around and across the Cayapas-Cotacachi Ecological Reserve The availability of these data has not led during these three decades to an invasion of the areas by mining companies or small scale miners."*³⁵
29. The second supposition is said to be rather speculative, since, according to Management, *"[w]e cannot foretell if, in the future, economically exploitable deposits will be found in [these] areas..."* and *"the impacts of mining activities may, under the right conditions, be positive."*³⁶ However, *"[w]hile one could speculate that the economic interests of the Requestors might be threatened (and it is equally possible – in the realm of speculation – that they could be improved), there are*

³¹ Ibid.

³² Id., at § 12.

³³ Id., at § 15.

³⁴ Id., at § 16.

³⁵ Id., at § 17.

³⁶ Id., at § 18.

*members of the community who might welcome the jobs and infrastructure development that accompany mining development.”*³⁷

30. Bank Management also denies that the Project will have any negative effect, actual or potential, on the protected areas listed by the Requesters, again stating that the thematic mapping conducted under the Project will not lead to mineral exploitation in those areas, even if a mineral deposit is eventually found. Management points out that Ecuadorian law prohibits mineral exploitation in protected areas and, even where it is allowed, *“thorough and complete environmental impact statements and consultation with the local community are required...”*³⁸ It also claims that the Project is helping local authorities to strengthen their regulatory capacity as far as mining activities are concerned.
31. Responding to the Requesters' allegations that the consultation process was inadequate, Management lists eleven NGOs consulted *“during Project preparation, appraisal and implementation.”*³⁹ It denies that these organizations are non-representative, as alleged by the Requesters,⁴⁰ and states that, in the Intag Area, meetings were held with both governmental authorities and civil society representatives. National and regional authorities were informed about the mapping activities through formal meetings and the public through press article or conferences known as *“popular assemblies.”*⁴¹ Management also claims that the consultation process related to the mapping activities has been enhanced since November 1999 and that further consultations will take place before the information gathered is eventually disclosed to the public in general. In the specific framework of the Geo-information sub-component, Management states that the necessary permits and approvals from the relevant governmental agencies were obtained by the Project executing entity.⁴²
32. As to the allegations concerning the EA process, Management states that *“[t]he Project as a whole is classified as an ‘A’ category project”* principally due to its other sub-components, and that *“[t]he Environmental Assessment prepared in 1992 quite properly focuses on the impacts and control of contamination generated by small-scale mining in Ecuador”* as well as *“other social and economic impacts on local communities.”*⁴³ It adds that the nature of sub-components *“such as mining information systems, mining cadastre, and geological and thematic mappings, were not considered to merit classification ‘A’ since they were in the nature of studies and information generation, that would not by themselves entail any diverse or significant environmental impacts.”* Management concludes that *“[w]hile Bank staff should*

³⁷ Ibid.

³⁸ Id., at § 23.

³⁹ Id., at § 33.

⁴⁰ Request for Inspection, *supra* note 17, at § 4(III).

⁴¹ Response, *supra* note 6, at § 33. See also Annex B, at § 5.

⁴² Id., at § 37.

⁴³ Id., at § 29.

*examine the entire Project as to its compliance with Bank policies, different components require different approaches.”*⁴⁴

2.4. Eligibility of the Request

33. For purposes of determining the eligibility of the Request and Requesters, the Panel reviewed the evidence submitted by the Requesters and Management, and, in April 2000, visited Quito, the Intag Valley and other relevant areas.⁴⁵ The Panel consulted with the Executive Director representing Ecuador and his staff. At the suggestion of the Government and after consultation with the Requesters, the Panel asked for an extension of the ‘eligibility period’ on January 31, 2000.
34. During his field visit, Panel Chairman, Jim MacNeill, met with representatives of DECOIN, the *Asociación de Caficultores Rio Intag* (Association of the Coffee Growers of Rio Intag) and with a large number of other Ecuadorian NGOs in Quito, Cotacachi and Apuela, as well as with local officials and individuals living in and around the Intag Area.⁴⁶ These discussions confirmed that the Request was supported by these groups, local officials and individuals.
35. On April 28, 2000, the Panel submitted to the Board its Report on the eligibility of the Requesters and the Request and its recommendation on the Request for Inspection. It concluded that the Requesters were eligible and that the Request met all of the technical eligibility criteria contained in paragraph 9 of the 1999 Clarifications. It also concluded that the Request and the Management Response contained conflicting assertions and interpretations about the issues, the underlying assumptions, the facts, compliance with Bank policies and procedures and harm. The Panel therefore recommended an investigation into the matters alleged in the Request.

2.5. The Board’s Decision

36. On May 15, 2000, the Executive Directors approved, on a no-objection basis, the recommendation contained in paragraph 31 of the memorandum from the Chairman of the Inspection Panel entitled *“Request for Inspection - Ecuador: Mining Development and Environmental Control Technical Assistance Project (Loan No. 3655-EC) - Panel Report and Recommendation,”* INSP/R2000-5. The Board thus authorized the Panel to conduct an investigation into the matters alleged in the Request.

⁴⁴ Id., at § 30.

⁴⁵ See Resolution No. IBRD 93-10; Resolution No. IDA 93-6. “The World Bank Inspection Panel,” (“the Resolution.”) The 1999 Clarifications to the Resolution that established the Panel are contained in the *“Conclusions of the Board’s Second Review of the Inspection Panel”* dated April 20, 1999.

⁴⁶ The Panel Chairman was assisted by the Panel’s Executive Secretary, Eduardo Abbott.

6. The Investigation Process

37. At the time of the investigation, the three members of the Panel were: Jim MacNeill (Chair),⁴⁷ Edward Ayensu,⁴⁸ and Maartje van Putten.⁴⁹ Panel Members Maartje van Putten (leader of the Investigation) and Jim MacNeill (Chairman of the Panel), accompanied by senior consultant, Professor Vernon Heywood⁵⁰ and by Eduardo

⁴⁷ **Jim MacNeill, O.C., (D.Sc. McGill, LL.D. Sask.), Chairperson**, a Canadian national, appointed August 1997. He is a policy advisor on the environment, energy, management, and sustainable development to international organizations, governments, and industry. He is Chairman Emeritus of the International Institute of Sustainable Development, and a member of the boards of the Woods Hole Research Center, the Wuppertal Institute on Climate and Energy Policy, and a member of the Jury of the Volvo Environmental Prize. He was Secretary General of the World Commission on the Environment and Development (the Brundtland Commission) and lead author of the Commission's world-acclaimed report, "Our Common Future." He served for seven years as Director of Environment for the Organization for Economic Cooperation and Development. Earlier, he was a Deputy Minister in the Government of Canada. Mr. MacNeill holds a graduate diploma in economics and political science from the University of Stockholm and bachelor degrees in science (math and physics) and mechanical engineering from Saskatchewan University. He is the author of many books and articles and the recipient of a number of awards, national and international, including the Order of Canada, his country's highest honor.

⁴⁸ **Edward S. Ayensu (Ph.D., London Univ., 1966)**, a Ghanaian national, appointed August 1998. He is President of the Pan-African Union for Science and Technology; Chairman of Edward S. Ayensu Associates Ltd.; Executive Chairman of Advanced Gracewell Communications Co. Ltd.; founding Chairman of the African Biosciences Network, and formerly the Secretary-General of the International Union of Biological Sciences; Chairman of the Ghana National Biodiversity Committee; member of the International Advisory Board on Global Scientific Communications, UNESCO; and member of the Board of Directors and International Vice-Chairman of the International Institute for Sustainable Development. Professor Ayensu is a fellow of various academies of arts and sciences. He has been Senior Advisor to the President of the African Development Bank and the Bank's Director for Central Projects. Previously he has held posts in international scientific organizations, including Director and Senior Scientist at the Smithsonian Institution, Washington, D.C. Professor Ayensu was a Visiting Fellow of Wolfson College, Oxford University, and Distinguished Professor of the University of Ghana, and twice the recipient of the Ghana National Science Award. He has a doctorate degree in the biological sciences from the University of London, and has published many books and articles on science, technology and social and economic development of developing countries. Professor Ayensu was the recipient of the Outstanding Statesman Award in Ghana during the Millennium celebrations.

⁴⁹ **Maartje van Putten (Diploma, Hoger Sociaal Pedagogisch Onderwijs, PVO 1983)**, a Dutch national, appointed October 1999. Ms. Van Putten was a member of the European Parliament until July 1999. She has been a highly active member of the Committee on Development and Cooperation for the past 10 years. Ms. van Putten has produced many outstanding reports on the effects of the GATT/Uruguay Round on the developing countries, fair trade, development aid for Asia and Latin America, the EU program for tropical forests and European policies towards indigenous peoples. She has extensive exposure to developing countries, and is active with non-governmental organizations and extremely committed to the cause of development. Ms. van Putten has closely worked with the WWF European Policy Office as a key political partner to promote better EU conservation and sustainable development policies. She was also a consistently active member of the ACP (African, Caribbean and Pacific Group)-European Union Joint Assembly. Ms. van Putten was a freelance multimedia journalist for most of her professional career, and was a Senior Fellow of the Evert Vermeer Foundation from 1981 to 1989. She is the author of many articles and books on globalization, international division of labor and on gender issues. Currently a member of the European Center of Development Policy Management in the Netherlands, Ms. van Putten is President of the Board of European Network of Street Children Worldwide (ENSCW). She holds a HBO (bachelor) degree in community development from Sociale Academy Amsterdam, and a Diploma, Hoger Sociaal Pedagogisch Onderwijs (PVO) Amsterdam.

⁵⁰ **Vernon Heywood (Ph.D., Cambridge Univ., 1953, D.Sc. Edinburgh Univ. 1965)** is Emeritus Professor in the University of Reading, President, IUBS International Council for Medicinal and Aromatic Plants (ICMAP),

Abbott (Executive Secretary), and Natalie Bridgeman,⁵¹ consultant, (hereafter referred to as the Team), made a field visit to Ecuador between November 4-15, 2000. Senior consultant Professor Mary Poulton⁵² assisted the Panel following its field visit.

38. On several occasions during the inspection, the Panel consulted with the Executive Director for Ecuador, Mr. Murilo Portugal, and the Alternate Executive Director, Mr. Patricio Rubianes. The Panel Team conducted interviews in Washington DC with Bank staff and consultants associated with the Project in Washington DC both before and after the inspection.
39. During its field visit to Ecuador, the Panel Team met with Ms. Liszette Torres, Under Secretary of Environmental Protection, Mr. César Anibal Espinosa, Under Secretary of Mines, and Ms. Samia Peñaherrera, all from the Ministry of Energy and Mines. At the Ministry of the Environment the Team met with Mr. Francisco Pareja, Under Secretary of the Environment, and Ms. Lilian Benitez, Under Secretary of Environmental Management. In the office of the PRODEMINCA Project, the Team

and a consultant to FAO, UNEP, GEF, and DFID. He was formerly Chief Scientist, Plant Conservation, of IUCN (The World Conservation Union) and Director of Botanic Gardens Conservation International. He holds Honorary Professorships at the Institute of Botany, Chinese Academy of Sciences, Nanjing, China and at the Universidad 'Juan Agustín Maza', Mendoza, Argentina. He is a world authority on biodiversity and the systematics and evolution of plants, and has had extensive experience of conservation problems in many parts of the world. He co-ordinated and edited the UNEP Global Biodiversity Assessment, and has advised governments, ministries, universities and NGOs in many parts of the world. He has been the recipient of numerous awards and distinctions. His publications include sixty books and 500 papers in scientific journals.

⁵¹ **Natalie Bridgeman** (BA, Cornell University, 1999 and JD Candidate, UCLA School of Law, 2002) has worked in the fields of international environmental and trade law and international financial institutional accountability. She has worked as the Trade and Environment Intern at the *Nautilus Institute for Security and Sustainable Development* in Berkeley, CA; as a Visiting Research Fellow at *Chile Sustentable* in Santiago, Chile; as an International Financial Institutions Intern at the *Center for International Environmental Law* in Washington, DC and will be a 2001 Summer Associate with *LeBoeuf, Lamb, Greene & MacRae, L.L.P* in their Litigation Department. Her Cornell University thesis is entitled "Environmental Reform at the World Bank: The IDA Opportunity and Congress" and her article "World Bank Reform in the 'Post-Policy' Era" is currently in press with the *Georgetown International Environmental Law Review* (Summer, 2001). She is currently Chief Articles Editor for the *UCLA Journal of International Law and Foreign Affairs* and will become Editor-in-Chief in April, 2001.

⁵² **Mary Poulton (Ph.D., University of Arizona, 1990)** is Head of the Department of Mining and Geological Engineering at the University of Arizona. She received her Ph.D. in geological engineering from the UA in 1990 and joined the faculty as an assistant professor after completing her dissertation. Dr. Poulton has published over 40 journal articles and conference papers on the application of computational neural networks to problems in the earth sciences, including geophysics, mining, mineral and petroleum exploration, hydrology, and atmospheric science. She is the author of a forthcoming book on the use of neural networks for geophysical data analysis. Dr. Poulton has led or participated in research projects totaling over \$3 million in funding. Dr. Poulton has taught a wide range of courses including mineral exploration, mineralogy and petrology for engineers, geophysics field methods and neural network computing. Dr. Poulton partnered with BHP Ltd., to develop mineral exploration projects for the geophysics field methods course, focusing on porphyry copper exploration. Her mineral exploration course was taken by geologists from all the major mining companies in southern Arizona. She has directed numerous Masters and Ph.D. mineral exploration projects. Dr. Poulton developed an interactive computer program called "Minerals, Where and Why" for K-12 education which has been distributed internationally. She is also the author of the minerals education curriculum materials distributed nationally by the American Geological Institute for middle and high schools.

had several meetings with the Project Coordinator, Mr. Antonio Bermeo, and Dr. Martin Williams, Project Director (Latin America) of COMEX and formerly of the British Geological Mission. The Team also met with Mr. Ramiro Larrea, Executive Director of the Centro de Planificación y Estudios Sociales (CEPLAES), which carried out a survey for PRODEMINCA entitled “*Perceptions in the Intag Zone about the geochemical information produced by PRODEMINCA.*”⁵³



Figure 4: Panel Team meets with the representatives of the Requesters, officials of the Municipality of Cotacachi and leaders from surrounding area.

40. In Quito the Team attended a meeting of representatives from CEDENMA⁵⁴, headed by Mr. Vicente Polit Montes de Oca. This umbrella organization of several Ecuadorian NGO's, supported DECOIN's Request for Inspection. The team also met with representatives of other NGOs, such as Mr. Jody Stallings of CARE Ecuador; Mr. Ricardo Moreno of Fundación Natura; Mr. Michael McCollm and Mr. Patricio Arrata of Fundación JATUN SACHA; Mr. Iñigo Salvador Crespo of CEDA; and Mr. Roberto Leon and Ms. Rebeca Justicia of Fundación Maquicupuna.
41. The Team met with representatives of donor agencies working in the Intag/Cotacachi area, including Mr. Carlos Figuero and Mr. Ricardo Molero in the Quito and Cotacachi field offices, respectively, of the Agencia Española de Cooperación Internacional; Mr. Wolfgang Lutz of GTZ (working for 'Proyecto Política Forestal' in the Ministry of Environment); and Mr. Jan Bauer, First Expert Secretary in Environment and Rural Development of the Netherlands Embassy.
42. The Team visited Imbabura Province. At the invitation of Cotacachi's Mayor, Lic. Auki Tituana Males, a meeting was held in the city's municipal hall. Representatives of the Requesters and of several sectors of the Canton's civil society expressed their

⁵³ *Percepciones sobre la Información Geoquímica Generada por PRODEMINCA en la Zona de Intag*, Quito, August 20, 2000.

⁵⁴ Ecuadorian Committee for the Defense of Nature and Environment (CEDENMA).

concern about the PRODEMINCA project and their fear that the publication of the maps would lead to formal and informal mining⁵⁵.

43. The Team also made a trip to the area where the Requesters live, the remote Intag Valley and the buffer zone of the Cotacachi-Cayapas Ecological Reserve. In the valley town of Apuela representatives of DECOIN and other organizations and sectors of the society met with the team and once again raised concerns about the publishing of the geo-information and maps, and the possible negative effects of mining activities on the environment and civil society.



Figure 5: Buffer zone of the Cotacachi-Cayapas Ecological Reserve.

44. Finally, the Panel visited the Bank's field office in Quito and met with the Resident Representative and staff.
45. The amount of time required both to determine eligibility and investigate this Request for Inspection was unusually long. This was due mainly to two factors. First, the Panel's resources were already largely committed to working on Requests previously received. More importantly, however, the Panel did its utmost to accommodate the internal constraints and priorities of the Borrower. The Requesters and Management were continuously informed and, when required, consulted about the factors surrounding the resulting delays in the process.

⁵⁵ See *infra*, at § 104.

Part Two

Environmental Compliance

and

Project Supervision

Chapter 3

Environmental Assessment

3.1. Applicable Environmental Assessment Policies

46. The Requesters claim a number of violations of OD 4.01 on Environmental Assessment. Before considering these in detail, it should be noted that the preparation of the Project spanned nearly three years. During this period the Bank adopted its new Operational Directive on Environmental Assessment, OD 4.01, on October 3, 1991, replacing OD 4.00, Annex A, of October 1989. In order to understand which policy and procedural requirements were incumbent upon Bank staff, a brief analysis of this transition follows.
47. As stated in Chapter 2, the Project was formally initiated in the Bank with the issuance of an Initial Executive Project Summary (IEPS) on April 9, 1990. It was appraised in December 1992 and approved by the Bank's Board of Executive Directors on October 21, 1993.
48. According to Management "[t]he [environmental] assessment was carried out from December 1990 to June 1991 and the Report⁵⁶ issued in June 1991. The recommendations of the report were used extensively in the Project design. The EA process continued until the end of 1992, and complemented by independent studies conducted by the Guayaquil Polytechnic Institute (ESPOL), several local consultants' reports, and an independent appraisal undertaken by consultants to the United Kingdom Overseas Development Agency which is a co-financier of the Project. The draft EA - *Environmental Impacts and Measures for Environmental Control* - was reviewed by LATEN and commented on October 9, 1992. The EA document was released for public consultation in November 1992.⁵⁷ All Project documents were cleared by LATEN on March 25, 1993. A summary of the Environmental Assessment dated January 1993 was circulated to the Executive Directors of the Bank.⁵⁸
49. As noted above, during this period, the Bank issued a new Operational Directive on Environmental Assessment, OD 4.01 which contained the following introductory statement: "[t]he Directive shall apply to all projects for which IEPS were issued after October 1, 1991. Projects for which IEPSs have been issued before that date are subject to OD 4.00, Annex A, issued on October 31, 1989; for these projects, *the*

⁵⁶Management Response, *supra* note 6 at § 28. The Project EA was prepared as the second of a series of three studies conducted by the Swedish Geological (SGAB) under a grant of BITS: Study 2, vol.1 - Environmental Impact and Measures for Environmental Control.

⁵⁷*Ibid.* The independent studies mentioned were also disclosed, except, because of commercial reasons, the ESPOL report.

⁵⁸*Ibid.* Unless otherwise noted in this Report, the term "EA Report" refers to the final, Bank approved, Environmental Assessment for PRODEMICA. This document has the following title: *Mining Development and Environmental Control Technical Assistance Project Environmental Impact and Measures for Environmental Control*, November 24, 1992 (updated February 1993).

new provisions should be applied where appropriate and feasible.” (Emphasis added)

50. It appears reasonable, therefore, to conclude that, except during the IEPS stage, OD 4.01 was applicable to the Project. Management does not seem to disagree with these views. In the Response, it states that: “*Management is of the opinion that the Project was prepared and appraised in complete compliance with OD 4.00, which was applicable at the time, as well as 4.01 (which is referred to in the Request).*”⁵⁹ (Emphasis added) During interviews, the staff concerned stated that they had followed OD 4.01 during all the final and most critical junctures of Project preparation and implementation. In addition, a review of the files available to the Panel, including LATEN's comments on the EA Report, show that most Project memoranda on the subject refer to OD 4.01. In any event, in practical terms, the provisions of both ODs are quite similar.

3.2. Categorization of the Project

51. One of the most important decisions that Management must make concerning environmental assessment is the category of the assessment that will be undertaken. That decision essentially determines the scope of the assessment, its breadth and depth, and the time and resources made available to undertake it.
52. Paragraph 19 of Annex A of OD 4.00 states, among other requirements, that “*[i]n the IEPS, the TM [Task Manager], in consultation with the RED [Regional Environment Department], should ... indicate the category (A-D) and the type of environmental analysis recommended....*” A similar requirement is found in paragraph 1 of Annex E of OD 4.01. It states that: “*[a]t identification and prior to the issuance of the Initial Executive Project Summary (IEPS), projects should be screened for environmental issues and assigned one of three categories: A, B, or C.*”
53. The EA category assigned to the Project was not included in the IEPS issued on April 9, 1990,⁶⁰ although the document points out the environmental risk posed by small-scale miners.⁶¹ The minutes of the IEPS meeting issued on April 27, 1990 devote a full paragraph to “*environmental aspects,*” but it is equally silent about the proposed Project’s environmental classification.⁶²
54. In its Response to the Request, Management confirms that “*[t]he Project as a whole is classified as an “A” category project, principally as a result of the sub-components which deal with a) containment and neutralization of hazardous mining wastes and, b) development assistance to small scale mines....*”⁶³

⁵⁹ Management Response, *supra* note 6, at § 27.

⁶⁰ Project Files, April 9, 1990.

⁶¹ Ibid.

⁶² Project Files, April 27, 1990.

⁶³ Management Response, *supra* note 6, at § 29.

55. Management adds, however, that the “*nature of the other six sub-components, such as mining information systems, mining cadastre, and geological and thematic mapping, were not considered to merit classification “A” since they were in the nature of studies and information generation, that would not by themselves entail any diverse or significant environmental impacts. While Bank staff should examine the entire Project as to its compliance with Bank policies, different components require different approaches.*”⁶⁴ In this regard, the Panel notes that, on the basis of all the records available to it, this judgement was not made at the time of the IEPS, in November 1990, when the Project should have been categorized. In fact, reference to an “A” classification first appears in the minutes of the November 1992 Pre-Appraisal Review Meeting.⁶⁵ The minutes state that: “*This is a category A project. Informal, uncontrolled gold mining activities are causing serious environmental degradation. People living in the vicinity of mines, as well as ore processors and mine laborers suffer from health, social and safety issues. Apart from actual toxicity, there is also a potential economic risk to downstream agriculture and aquaculture.*” By this time, of course, OD 4.01 was in force.⁶⁶
56. The Panel recognizes that attributing different EA categories to different components of a project was not prohibited under OD 4.00, although it was under OD 4.01. Also, as discussed in Chapter 4 of this Report, it concludes that adverse environmental consequences resulting from the thematic mapping sub-component may be considered as remote. Given that a major objective of the Project was to promote mining activities in the entire country, the Panel nevertheless feels that a more expanded and robust EA process should have been undertaken. This would have enabled the Borrower and Bank Management to better understand and prepare for potential adverse impacts derived from the Project as a whole.
57. **The Panel notes that in order to meet the procedural requirements of OD 4.00, Annex A, (and OD 4.01) on EA categorization, the environmental category of the Project should have been determined and indicated in the Initial Executive Project Summary. The Panel finds, however, that assigning the Project a Category “A” for environmental assessment purposes was in compliance with Bank policies on environmental assessment.**

3.3. Content of the EA Report

58. The Requesters claim that the EA “*...did not include analyses or plans for mitigating environmental impacts on protected nature reserves, private reserves, endangered*

⁶⁴ Id., at § 30. See also *infra* at footnote 78.

⁶⁵ The first reference was found in an Office Memorandum dated February 28, 1991, enclosing government clearance for the release of the EA when ready, refers to “*release of an EA early in the project cycle for a Category A project.*”

⁶⁶ In fact, nowhere in the records available to the Panel, including the MOP, the Environmental Assessment Summary submitted to the Board (SecM93-25), or the FEPS, is there any reference to the notion that certain Project components “*were not considered to merit classification ‘A.’*”

species, or communities living in the areas affected by the project.”⁶⁷ In its Response, Management states that such analysis or plans are not required since the Project is not financing specific investments in these areas.⁶⁸

59. According to Bank policies set forth in OD 4.00, Annex A and OD 4.01, an EA covers “... *project specific and other environmental impacts in the area of influence of a project*”, for the purpose of ensuring “... *that the project options under consideration are environmentally sound and sustainable.*” Therefore, the Project’s environmental impact “... *should be recognized early in the project cycle and taken into account in the project selection, siting, planning and design.*”⁶⁹ A project-specific EA should cover “*environmental baseline conditions...potential environmental impact, direct and indirect...environmental comparison of alternatives...preventive, mitigatory and compensatory measures...environmental management ... [and] monitoring.*”⁷⁰ The ODs provide that regional and sectoral EAs “...*will have identified the relevant issues, collected much of the data, and, in general, greatly reduced the work needed in the project-specific EAs.*” The main elements of an EA that are relevant to the claims of the Requesters are reviewed below.

3.3.1. The Geographical Scope of the Environmental Assessment

60. A clear understanding of the spatial parameters of a project is, of course, fundamental to its proper assessment. OD 4.01 is quite clear on this. Paragraph 1 states that “[f]or the purpose of this Directive, [an] EA covers project-specific and other environmental impacts in the area of influence of a project.” Furthermore, the OD calls for a “[c]oncise description of the project’s geographic, ecological, social, and temporal context....” This is to be based on an “[a]ssessment of the dimensions of the study area and description of relevant physical, biological, and socioeconomic conditions, ...”⁷¹
61. OD 4.01 also states that “[c]urrent and proposed development activities within the project area (but not directly connected to the project) should also be taken into account.”⁷² And it requires the “[i]dentification and assessment of the positive and negative impacts likely to result from the proposed project.”⁷³
62. The EA Report contains a thorough description of the history of mining, an action plan and a summary of the ‘relevant’ sub-components. It also includes a definition and scope of the environmental aspects and social consequences of small scale mainly ‘artisanal’ gold mining activities, the problems in mining communities and health

⁶⁷ Request for Inspection, *supra* note 17, at § 4 (III).

⁶⁸ See Management Response, *supra* note 6, at § 32.

⁶⁹ OD 4.01, at § 2. See also OD 4.00, Annex A, at § 3.

⁷⁰ *Id.*, at § 4. See also OD 4.00, Annex A, at § 5.

⁷¹ See OD 4.01, Annex B, at § 2 (c) and (d).

⁷² *Id.*, at § 2 (d).

⁷³ *Id.*, at § 2 (e).

problems for people directly or indirectly involved.⁷⁴ It states that: “[t]he accumulation of contamination in old mining areas appears to be substantial; e.g. mercury and other heavy metals are found in river sediments. In these areas, the general destruction may have gone so far that moderate corrective measures will have very little positive effect on improving the environmental quality. On the other hand, where mining activities began only a short time ago, the rate of alteration and damage of the natural resource may be less acute. This means that strict protective measures in such areas will have a much stronger positive effect, relatively speaking, than they would in areas long subject to the contamination of mining wastes.”⁷⁵ The document describes extensively the principal affected Districts; Portovelo-Zaruma, Nambija, Ponce Enriquez, Rio Gala-Rio Chico, Chinapitza Area and El Carmen de Pijili, all located in the south of Ecuador.

63. An examination of the EA Report reveals that the north of Ecuador, and more particularly the biologically rich Cotacachi-Cayapas Ecological Reserve, is never mentioned. The scope of the EA appears to cover only the south of the country, focussing on the environmental and social impacts of existing small scale gold mining activities. Management’s Response to the Request appears to confirm this.⁷⁶
64. In addition, the EA Report does not appear to address the broader issue of the likely impact of increased mining activity in the country as a whole, including the North. Since two of the major objectives of the Project are to attract new mining investment and to arrest mining-related degradation, it is reasonable to assume that the development of new mines in areas where there may be a significant risk of environmental degradation was an expected consequence of the Project. This is recognized, at least indirectly, by the June 1991 draft EA Report, which states that “the environment and the permanent human population, have been exposed to pollution and other stress caused by mining activities... [and] ...in practically untouched natural ecosystems, where contaminating human activities started only a short time ago, the rate of alteration and damage to the natural resource is much faster.”⁷⁷
65. The limited scope of the Environmental Assessment in all of its versions often came up during interviews with staff. They recognized that, in spite of LATEN’s concerns discussed in section 3.3.4. below, the EA was restricted to the South and that, during the design of the Project and the first years of implementation, the Project’s focus had been exclusively on the South and the social and environmental problems of illegal mining found there.
66. **The Panel finds that in limiting the spatial/geographical scope of the Environmental Assessment in the manner described above, the Bank was not in compliance with the relevant provisions of OD 4.01 (and OD 4.00, Annex A.)**

⁷⁴ EA Report, *supra* note 56, at § 56.

⁷⁵ Ibid.

⁷⁶ Management Response, *supra* note 6, at § 29.

⁷⁷ Lander, *supra* note 4, at p. 10.

3.3.2. Baseline Data

67. Baseline data are fundamental to any environmental assessment and Bank policies on environmental assessment require that certain data be gathered for project-specific EA reports. In discussing the “*Outline of a Project-Specific EA Report*,” OD 4.01 states that an EA should include a number of categories of baseline data. Among other things, it mentions an “[a]ssessment of the dimensions of the study area and description of relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Current and proposed development activities within the project area (but not directly connected to the project) should also be taken into account.”⁷⁸
68. The Panel notes that the EA Report is written almost entirely from an abiotic environment point of view, focussing on the effects of pollution caused by artisanal mining activities. It does not address issues of the living environment, although it does say that “[d]ue attention must be paid to the human sector of the environment, in particular since such large amounts of people are directly involved, both as actors and as targets.”⁷⁹ Nor does it cover the biological environment, such as the landscapes, vegetation, forests, and ecosystems, in its baseline studies, and it is virtually silent on the extraordinarily rich biodiversity of Ecuador. Perhaps as a consequence, the EA Report does not elaborate on possible future negative impacts of the Project on the natural environment, caused in this case by potential future mining activities.
69. In a section entitled “*Creating expertise in the control of occupational health and toxicological problems in mining communities*,” the EA Report claims that: “[i]nformation about the state of the environment in Ecuador at present is extremely difficult to obtain. This is partly due to the general lack of accurate basic data, but to some extent to a basic inefficiency (or even unwillingness) to compile and distribute clear training information on environmental matters.” It then goes on to add that “[t]he result is that the public is largely left with publications issued by non-governmental organizations, such as ‘Fundación Natura’ and its project for environmental education, ‘EDUNAT III’. Many of these publications are of a high quality and the whole activity is, without any doubt, very meritorious. However, the information published by the NGOs sometimes is rather tendentious, although it may stand on a sound scientific basis.”⁸⁰
70. These comments appear to overlook the extensive scientific literature available at the time on various aspects of the Ecuadorian environment. This extensive literature covers vegetation types, forests, endangered plant and animal species and habitats, hotspots, phytogeography and geobotany, floristics, etc. of Ecuador. It is published

⁷⁸ OD 4.01, Annex B, at § 2(d). See also, OD 4.00 Annex A, at § 8 and OD 4.00 Annex A, at § 2(d). See also a similar requirement for sectoral EAs in OD 4.01, at § 7.

⁷⁹ EA Report, *supra* note 56, at § 54.

⁸⁰ *Id.*, at § 195 and 196.

by scientific institutions both in Ecuador and in other countries (USA, Denmark, UK, etc.). Yet, little or no reference was made to this literature in the EA Report.⁸¹

71. **In light of the above, the Panel finds that the Bank was not in compliance with the requirements of OD 4.01 concerning the provision of baseline environmental data in the EA Report.**

3.3.3. Institutional and Legal Framework

72. Paragraph 1 of OD 4.01 requires the EA to take into account, inter alia, the country's overall policy framework, national legislation, and institutional capabilities.⁸²
73. The EA Report's Executive Summary states that "[t]he present overall environmental legislation and the specific regulations on environmental quality are dictated by a number of different laws...and their associated regulations, making the overview of the legal situation in this field difficult."⁸³
74. Consistent with Bank policies, however, the EA Report contains a chapter on "Existing Policy, Administrative and Legal Framework." It contains a summary review of environmental laws and regulations applicable to the mining sector and a brief description of its institutional set up and Ecuador's new mining legislative and policy framework. The EA states that, pursuant to the new Mining Law,⁸⁴ "...the National Directorate of the Environment (DINAMA) within the Ministry of Energy and Mines (MEM) is the central agency responsible for environmental protection in the mining sector, although there appears to be some degree of overlap with other agencies regarding the use and potential contamination of water resources."⁸⁵
75. Management's analysis of the institutional capabilities of DINAMA⁸⁶ is stated in Annex 3 of the MOP as follows: "DINAMA is also in charge of monitoring conditions during mining operations and checking their compliance with the

⁸¹ For instance, for the Western Ecuador/Chocó Region, which was well known to be exceptionally rich in both endemic and other species (e.g. A.H Gentry, Endangered plant species and habitats of Ecuador and Amazonian Peru. In Prance, G.T. & Elias, T.S. (eds), *Extinction is Forever*, New York Botanical Garden at pp.136–148 (1977); A.Gentry, *Extinction and conservation of plant species in Tropical America: a phytogeographical perspective*, at pp.110–126, [see also Fig.3 and Table 2]; Hedberg, I. (ed.) *Systematic Botany, Plant Utilization and Biosphere Conservation*, (Almqvist & Wiksell, Stockholm, 1979); National Research Council, *National Priorities in Tropical Biology*, see Coastal forests of Ecuador, at p.58 (1980). It is interesting to note that the term "hot spots" which designates areas exceptionally rich in biodiversity became widely used following publication of the following paper: N. Myers, *Threatened biotas: "hotspots" in tropical forests. Environmentalist* 8, at pp.187-208 (1988). In fact, Western Ecuador (which includes the Cotacachi-Cayapas Ecological Reserve) was one of the 12 tropical rain forest hot spots identified in this paper.

⁸² Similar provisions are found in Annex B of OD 4.01 and Annex A1 of OD 4.00.

⁸³ EA Report, *supra* note 56, at §12.

⁸⁴ Ley de Minería (The Mining Law), No. 126 published in the Official Registry No. 695 of May 31, 1991.

⁸⁵ EA Report, *supra* note 56, at § 39.

⁸⁶ Since April 1999 DINAMA's environmental functions are not longer in charge of a directorate in MEM, they were entrusted to the Unidad Ambiental Minera (UAM), the environmental mining unit under the Dirección Nacional de Minería (DINAMI) the National Directorate of Mining.

approved plan. In addition DINAMA establishes when a mining activity causes “damage to the environment” which is one of the causes of extinction of mining rights.⁸⁷ However, DINAMA is a weak agency, in need of both institutional and technical strengthening to perform these functions appropriately..., [and] ... to prepare it for its expanded role, as mandated by the new mining law and the associated regulatory framework.”⁸⁸

76. The Project included a specific sector policy management component that included US\$2.8 million equivalent for institutional strengthening and modernization of the regulatory framework, including technical assistance to build capacity and strengthen sector oversight institutions (MEM), especially those responsible for environmental protection (DINAMI), land management (DINAMA), geological information infrastructure and small scale mining matters (CODIGEM/DINAGE).
77. **The Panel finds that the EA Report’s analysis of the institutional, policy and legal framework, although not comprehensive, was in compliance with relevant Bank policies as set forth in OD 4.01.**

3.3.4. Revisions and Approval of the EA Report

78. The preparation of the EA is the responsibility of the Borrower.⁸⁹ However, “*the Bank’s Task Manager assists and monitors the EA process with support from the RED.*”⁹⁰ OD 4.01 points out that “*the EA preparation should form part of the overall feasibility study or preparation work for the project*” and that the “*completion of the EA report is a prerequisite for the departure of the appraisal mission.*”⁹¹ The EA preparation must include, *inter alia*, the project’s environmental screening⁹² and consultations with affected groups and NGOs.⁹³
79. Paragraph 12 of OD 4.01, Annex D, states that: “[t]he findings of the EA process and the procedures used in its preparation are summarized in the text of the SAR and in the Memorandum and Recommendation of the President. A SAR annex summarizes the EA of category A projects more fully. The summary covers, *inter alia*, **environmental baseline conditions**; the alternatives considered; preventive mitigatory, and compensatory actions; **the capability of environmental units and measures to strengthen them**; environmental monitoring arrangements; **revisions of the EA as a result of the appraisal**; and the **borrower’s consultations** with affected groups and NGOs. These factors provide the basis for the RED’s formal

⁸⁷ Article 101 of the Mining Law, *supra* note 82, listed damage to the environment as one of the causes of extinction of mining rights. However, this is no longer the case after the amendments introduced by the Trole II Law. See *infra* note No. 140.

⁸⁸ MOP, *supra* note 1, Annex 3, at § 14.

⁸⁹ See OD 4.01, at § 3.

⁹⁰ *Id.*, at § 15.

⁹¹ *Ibid.*

⁹² *Id.*, at § 17.

⁹³ *Id.*, at § 19 & 20. Similar provisions are found in OD 4.00, at § 22-25.

environmental clearance, prior to the authorization of negotiations by the Regional vice president."⁹⁴ (Emphasis added.)

80. The June 1991 draft EA Report was reviewed by LATEN, the Regional Environment Division of LAC. On October 9 1992, prior to the November 16 Pre-Appraisal Meeting, LATEN recommended that the Environmental Assessment should indicate: *(i) the extent to which project-induced mining expansion could (in the absence of effective regulation) damage ecologically sensitive areas and threatened plant and animal species; (ii) whether a clear legal and regulatory framework exists to prevent or strictly control mining concessions in wildland areas; and (iii) the specific environmental components and conditions which should be incorporated within the project design to protect "wildlands of special concern", as defined in the Bank's Wildlands Policy....*"⁹⁵
81. In the same memorandum, LATEN further suggested that the Project could finance the development of a detailed map of those wildland areas (including legally protected areas such as National Parks and critical habitats of known endangered species) where new mining concessions would not be granted.
82. Further, in the same memorandum, LATEN advised that *"...we believe that the report needs to be substantially strengthened in several key respects in order to comply with the **Bank's Operational Directive (OD) 4.01** (sic) on environmental assessment. ...Although this 'Category A' project seeks to improve the environmental management of ongoing gold mining operations, it would also create an institutional framework intended to facilitate the rapid expansion of new, industrial scale mining by the private sector in Ecuador. **The EA Report thus needs to discuss and (to the extent possible) quantify the additional environmental impacts anticipated from the increase in private sector mining activity. For example, the EA Report should estimate the expected change in such indicators as (i) hectares of forested and other land lost to new mining operations; (ii) specific sections of streams and rivers affected by sedimentation from new gold and other mining; (iii) percent changes in the populations of sensitive species...; (iv) the number of new mining operations and miners; and (v) the extent of growth in the area and population of mining settlements; among others. The EA Report should also indicate how and quantify the extent to which these impacts would be prevented, reduced, or compensated by the project's proposed environmental mitigation measures.**"*⁹⁶ (Emphasis added)
83. Subsequently, the EA process, as Management terms it, continued in the form of independent studies.⁹⁷ They added little to the assessment of the biological

⁹⁴ See OD 4.01, Annex D, at § 12, In this case, the "RED" would be the Regional Environment Department of the Latin American and Caribbean Region, hereinafter called LATEN. Also see OD 4.00, Annex A, at § 26.

⁹⁵ Project Files, October 9, 1992.

⁹⁶ Ibid.

⁹⁷ See Fernando Lopez M., *Componente Social del Estudio Preparatorio No.2: Pequeña Minería y Control del Medio Ambiente*, (1991) and Fernando Carpio, *Proyecto de Desarrollo Minero y Control del Medio Ambiente. Estudio Preparatorio 2 Sobre Desarrollo de la Pequeña Minería y Medidas de Control Ambiental: Estudio de las Condiciones de Trabajo y Salud en la Minería Artesanal en El Ecuador*, (1991).

- environment apart from a one-sentence description of the vegetation and a reference to the rapid loss of plant cover in an area occupied by an encampment and adjacent areas.
84. In addition, at the time of the Project Appraisal, ODA (today DFID), a co-financier of the Project commissioned consultants to undertake a separate “*fairly general overview*” of the Project “*from both the economic and environmental point of view.*”⁹⁸ The Report includes a section on “*Realism of the Environmental Measures*” in which it is stated that: “[w]e have a general concern that the World Bank, although taking the environmental measures seriously, has not been adequately advised. Evidence of this is shown by the quality of the environmental impact analysis of current mining activity.”⁹⁹
85. At the Pre-Appraisal meeting of 16 November 1992, it was agreed that the EA and proposed draft terms of reference for environmental sub-components would be evaluated by LATEN staff at appraisal and, as appropriate, updated before proceeding to the Board.¹⁰⁰ Terms of Reference for an Environment Mission were agreed¹⁰¹ in which “[an environmental staff] will analyze the project’s environmental aspects in light of LATEN’s comments, and evaluate the Government’s capabilities regarding environmental issues associated with mining activities.”¹⁰²
86. During a post-appraisal meeting on January 28, 1993, before authorization to negotiate was sought, LATEN raised a number of critical environmental issues which it later reflected in an internal electronic mail dated February 11, 1993.¹⁰³ LATEN’s comments covered a vast array of important issues, many of them similar to those made on previous occasions. Central to LATEN’s concerns were the legal and institutional framework for environmental protection in Ecuador and the Project’s handling of “*natural and indigenous reserves.*”¹⁰⁴
87. Moreover, demonstrating its concerns with the Project as a whole, LATEN stated that “[a]lthough mining activity is currently concentrated in the South of the country, the scenario for medium and long-term mining development and, more specifically, the potential environmental and social consequences which may result from overall expansion of activity are unclear at this point. Since these issues are not within the project’s proposed scope, LATEN suggested that greater attention be given to firming up the country’s capacity to deal with environmental assessment (EA) in the mining sector.”¹⁰⁵

⁹⁸ Overseas Development Administration, *Ecuador Mining Development and Environmental Control Project: Appraisal Mission*, January 1993, § 1.1.

⁹⁹ *Id.*, at § 7.2.

¹⁰⁰ Project Files, December 22, 1992.

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ Project Files, February 11 1993.

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

88. At this time the Project was ready for negotiations, and it appears that LATEN's concerns, repeated on several occasions, were largely disregarded by the Project preparation team. In another internal electronic mail dated February 25, 1993, LATEN addressed, inter alia, the timing of the unit's comments, stating that: "*I am sympathetic that these written comments were submitted rather late. My own advice would be to make sure, at minimum, that all comments made at the meeting are incorporated in the negotiations package. Others should be incorporated to the extent possible.*"¹⁰⁶ On March 25, 1993, LATEN cleared the Project for negotiation. The cover memorandum dated March 29, 1993 seeking authorization to negotiate from the LAC Vice President on the pre-negotiations package informs him that the "*recommendations and suggestions made by LATEN have been included.*"
89. During interviews with the Panel, one of the Bank's environmental officers involved in Project preparation and specifically charged with addressing LATEN's concerns, acknowledged that these concerns were not addressed in the revised EA Report. He said that "[t]here was a gaping hole in the revised EA – it must have been a mistake." He also felt that the mapping overlays of Protected Areas should have been included in the revised EA Report.
90. **The Panel finds that several critical recommendations made by LATEN were not incorporated in the EA Report and subsequently reflected in the design and implementation of the Project. In the Panel's view, LATEN's recommendations were consistent with Bank policies and its clearance should have been issued after it had received evidence that they had been appropriately incorporated.**
91. **Since the recommended revisions to the EA Report were not made to bring it into compliance with Bank policies, in the Panel's view, therefore, the Bank was not in compliance with paragraph 12 of OD 4.01.**¹⁰⁷

3.3.5. Consultation

92. The Requesters alleged that "[t]he EA was drawn up without the participation of the communities and NGOs involved and without taking their opinions into account"¹⁰⁸ and that "*the PRODEMINCA neglected several points*", including that "*it failed to consult local communities and NGOs, as well as regional authorities and coordination entities.*"¹⁰⁹
93. OD 4.01 deals clearly with the requirements for consultation and disclosure. It states that the views of affected groups and local NGOs are expected to be taken "*fully into account in project design and implementation, and in particular in the preparation of EAs.*" It adds that "[t]his process is important in order to understand both the nature

¹⁰⁶ Project Files, February 25, 1993.

¹⁰⁷ See *supra*, note 92.

¹⁰⁸ Request for Inspection, *supra* note 17, at § III.

¹⁰⁹ *Id.*, at § 4(III).

*and extent of any social or environmental impact and the acceptability of proposed mitigatory measures, particularly to affected groups.” And it points out that “[c]onsultations do not reduce the decision authority of the borrower, but are a valuable way to improve decision making, to obtain feedback on the EA process and draft report, and to increase community cooperation in implementing the recommendations of the EA.”*¹¹⁰

94. As to the timing of consultations, OD 4.01 stipulates that “[s]uch consultations should occur at least at the following two stages of the EA process: (a) shortly after the EA category has been assigned, and (b) once a draft EA has been prepared.”¹¹¹ For further clarity, it adds “[i]n order for meaningful consultation to take place between the borrower and affected groups and local NGOs, it is necessary that the borrower provide relevant information prior to consultations.”¹¹²
95. Management acknowledges that “[t]he EA and the Project MOP documents do not include specific requirements regarding consultation procedures to be carried out in relation to the implementation of the thematic mapping sub-component.” However, it adds that “ODA, the activity co-financier, considers it [i.e., thematic mapping] environmentally neutral, but expresses its concerns with respect to potential expanded mining activities.”¹¹³
96. Management also notes that LATEN, in a memo commenting on the “yellow cover SAR meeting” of January 28, 1993, “recommends to include the thematic mapping of protected areas and indigenous reserves and, also to conduct consultation with NGOs, indigenous groups when a first version of the geological and thematic maps are ready.”¹¹⁴
97. Management denies that the consultation process was not adequate. It contends that local authorities or community representatives were contacted before initiating the mapping sub-component and before entering the areas to be mapped. It provides a list of “information meetings” conducted with local communities, including a list of meetings in the Imbabura Province.¹¹⁵
98. Management states that before going into an area to be mapped, it was standard practice “to inform” the population living in the areas “where investigations, including thematic mapping, are intended to be carried out. Since August 1995 when this sub-component was initiated, the Project informed national and regional authorities through formal meetings, and the population at large through press articles or conferences open to the public.”¹¹⁶

¹¹⁰ OD 4.01, at § 19.

¹¹¹ Id., at § 20.

¹¹² Id., at § 21.

¹¹³ Management Response, *supra* note 6, Annex B, at § 1.

¹¹⁴ Ibid.

¹¹⁵ Ibid.

¹¹⁶ Id., at § 3.

99. As a result of these meetings, Management contends, the Project was able to take into account the views expressed in planning the mapping work. The example provided relates to the Intag Area, the buffer zone to the south and southwest of the protected area. Management states that, in February 1998, Project staff informed the mayor of Cotacachi about the investigation. He suggested that a meeting be held directly with the communities in the Intag Valley. Such a meeting was held on April 4, 1998 and, as a result of it, Project management took the decision to exempt the Intag Valley area from the survey (see Map). It should be noted, however, that other sources informed the Panel that existing mineral data made the mapping of this area unnecessary.¹¹⁷ Moreover, the Requesters maintained that the protected areas and buffer zones provide a number of very important environmental goods and services for the inhabitants. They pointed out that *“Hundreds of rivers and streams have their source in these areas and the forests protect the water for human use and farming. The natural forests in these areas play an essential part in regulating the climate and providing enough humidity and rain for farming and animal husbandry, the principal economic activities in our area.”*¹¹⁸
100. Finally, Management advises that in November 1999, after the information needed for the thematic maps had been collected and processed (i.e., a month before the Request for Inspection was received): *“a number of enhancements to the consultation process related to thematic mapping were introduced.”* This included the design of a *“specific consultation program”* by the Project’s social team.¹¹⁹ Management adds that *“[f]urther consultations with the local communities will take place and, in particular, with the communities bordering the Cotacachi-Cayapas protected area.”*¹²⁰
101. The facts indeed confirm that, contrary to the requirements of the OD, the northern part of the country was neglected during the EA process. As noted earlier, the OD requires that consultations should occur shortly after the EA category has been assigned, and once a draft EA has been prepared. According to the facts provided by Management, in a “sample list of information meetings conducted with local communities,” meetings in the Imbabura Province did not commence until March 5, 1998, five years after the EA Report was completed.¹²¹ (Indeed, it appears from Management’s Response to the Request that consultations did not commence in the rest of the country before May 1996.) It is worth noting that Management does not characterize these as meetings “to consult” but rather as meetings “to inform.”

¹¹⁷ The Panel received another perspective on this decision. During its eligibility visit to Ecuador, the decision came up during a discussion with the head of the BGS Mission responsible for the mapping. He told the Panel that the decision not to map the Intag Area was taken because the most of the critical geo-chemical data was already available. It had been collected during the extensive mining surveys in the Junin area. Thus, the thematic mapping of the Area would have added little that was critical to the available information base.

¹¹⁸ Request for Inspection, *supra* note 17, at § 3. See also *supra* § 14.

¹¹⁹ Management Response, *supra* note 6, Annex B, at § 7.

¹²⁰ *Ibid.*

¹²¹ *Id.*, at p. 23.

102. It appears that Management was occupied with the challenges posed by the situation in the south, where the main problems and opportunities were seen to exist. During interviews with Bank staff, they repeatedly affirmed that it did not occur to them that the geo-information component of the Project, and more specifically the release of a CD-ROM with geochemical data, could and would be seen to pose a serious risk to the Cotacachi-Cayapas Ecological Reserve and to the well-being of the residents and communities of the Intag Valley.
103. In the Panel's view, Management's approach to consultation was unfortunate. During its investigation the Panel was confronted repeatedly with a strongly expressed fear that these activities would lead to mining in the Region surrounding the Cotacachi-Cayapas Ecological Reserve. This fear was expressed not only by representatives of residents of the Intag Area, but also the Mayor, councilors and residents of the town of Cotacachi and leaders of several NGO's in Quito who met with the Panel. Although it is obviously hard to estimate the percentage of the population in the Intag Area and the town of Cotacachi who shared these fears and concerns, it was clearly a substantial number.
104. During its Town Hall meeting with the Mayor Auki Tituana Males, Councilors and residents of Cotacachi, the Inspection Team heard representatives of different groups from civil society express their fear that the publication of maps and the CD-ROM would lead to mining around and even in the Cotacachi-Cayapas Ecological Reserve, with a range of negative consequences for their communities. The Mayor presented the Team with copies of two documents related to this fear: a Municipal Resolution declaring the Cotacachi Canton an Ecological Zone, and Minutes containing the Resolutions and suggestions of the Fifth Cantonal Unit Assembly of September 13-15, 2000. Of significant relevance to this Project is Resolution 17 of the Minutes that states that *"the Assembly demands from the Ministry of Environment and the Ministry of Energy and Mines that dissemination of PRODEMİNCA's Mining information about the Cotacachi-Cayapas Ecological Reserve and the [Cotacachi] Canton in general be stopped."*¹²² A day later, at a meeting with the Inspection Team in Apuela, a small town in the Intag Valley, (see Figure 1) about 40 representatives of different community based organizations expressed similar fears.
105. The Team found that part of the information on which the local people based their opinions, was in fact misinformation. Some people, for example, had the impression that PRODEMİNCA was a mining company. Some did not know that parts of the Intag Valley would not be mapped. Others were "convinced" that PRODEMİNCA was producing detailed maps that easily could lead to an "invasion" of illegal or artisanal miners. No one, of course, had seen the maps or had the CD-ROM explained to them. People at these meetings spoke about their experience with a Junín mine site being developed by a foreign mining company that was forcibly removed by elements of the community. This traumatic event engendered fear and, the Panel was informed, caused severe problems in the community between those that

¹²² "Resoluciones aprobadas y sugerencia adicionales en la 5ta Asamblea de Unidad Cantonal 13-15 Septiembre del 2000, Cotacachi."

were employed by the company and those that were against mining activities in the Valley.

106. In the Panel's view, a program of consultation undertaken shortly after a draft EA has been prepared, as required by the OD, could have addressed the legitimate needs of potentially affected people for information about the Project. Conducted in the spirit of the OD, it could have led to a better understanding about what was intended, allayed latent fears, and provided feedback that would have improved the Project and increased community cooperation in implementing it.
107. **On the basis of the above, the Panel finds that the Bank was not in compliance with the requirements of OD 4.01 concerning consultation, during the preparation of the Project.¹²³**
108. **However, the Panel commends the November 1999 initiative to strengthen and enhance, however late, the consultation process related to geo-information and thematic mapping.**

¹²³ Similar provisions are found in OD 4.00, Annex A, at § 12.

Chapter 4

Thematic Mapping and Natural Habitats

4.1. The Claims and the Response

109. The Requesters claim that the Bank has transgressed its own policies and procedures by supporting a project that will “*involve the significant conversion or degradation of critical natural habitats.*”¹²⁴ The relevant Bank policy referred to here is OPN 11.02, Wildlands of June 2, 1986.¹²⁵ The policy states that “*The Bank’s general policy regarding wildlands is to seek to avoid their elimination and rather to assist in their preservation. Specifically, (1) the Bank normally declines to finance project involving conversion of wildlands of special concern (as defined in Section 2.3)...*”¹²⁶
110. The Requesters further claim that “*even in the prospecting phase of the PRODEMINCA project*”¹²⁷ *damage has already been done to the areas mentioned by paths being opened up for personnel engaged in prospecting and then being used by people who have nothing to do with the project as access route to the Cotacachi-Cayapas Ecological Reserve.*”¹²⁸
111. The Request also claims that the Bank has also transgressed “*Ecuadorian laws by fostering activities prohibited by domestic law. Article 199 of the General Regulations issued pursuant to the Wildlife, Natural Resources and Forest Law, for instance, states that ‘mining is not one of the activities permitted in the State’s Natural Areas System.’ [Similar provisions are to be found in] Article 5 and Chapter III (Articles 74-78) of the Forest Law and in Article 87 of the Mining Law, which specifies: ‘The State shall not foster mining activities in Protected Areas.’ Article 18 of the same Law defines prospecting as ‘collection of river sediment and rock samples to test for mineral traces.’ Thus the project clearly transgresses paragraph 14 of the World Bank’s OD 4.01, which states that both the Borrower and the Bank should use common sense when applying EA procedures, in order to ensure that project design and execution are satisfactory from every point of view, both environmental and economic, and that they conform to the laws, policies, and procedures of the borrower.*”¹²⁹
112. In addition, the Requesters contend that the Bank failed to take into account the possible impact of divulging the information contained in the thematic mineral maps.

¹²⁴Request for Inspection, *supra* note 17, at § 4 (I).

¹²⁵In September 1995, OPN 11.02 was converted into the OP/BP/GP format as OP, BP and GP 4.04 (Natural Habitats).

¹²⁶OPN 11.02, at § 21.

¹²⁷Based on Art. 18(a) of the Mining Law, *supra* note 82, the Requesters claim that the geo-information activities constitute mineral prospecting. The law defines “prospecting” as the search for traces of new mineral areas.

¹²⁸Request for Inspection, *supra* note 17, at § 3.

¹²⁹*Id.*, at § 4(III).

As noted earlier, their fear was and continues to be that disclosure of such information would help identify suitable areas for mining exploitation thereby triggering an invasion by mining companies and illegal miners.¹³⁰ They request that *“the information gathered in protected areas, public or private, including its buffer zones, and areas which conflicts have arisen between communities and mining companies, not be made public.”*¹³¹

113. Management does not dispute the fact that the area contains unique biodiversity (although the EA Report does not refer to this) but argues that OPN 11.02 *“is not applicable to this Project because of the objectives of the Project was not to convert wildlands into intensive land and water uses. The Project is primarily a technical assistance Project. The thematic activities themselves do not have any physical impact on the environment in general or on the wildlands/natural habitats in particular.”*¹³² The production and publication of the thematic maps (as well as geological maps) was undertaken by the British Geological Mission (BGM).¹³³ On its face, this could be regarded as a narrow interpretation of the Bank's policy on wildlands of special concern and fails to take into account the overall aim of the Project which is to increase the amount of mining in the country, and which, if successful, will lead to an increase of the area of land (and any vegetation cover and biodiversity contained in it) that is converted, modified, damaged or contaminated.

114. Management's Response added that the *“thematic mapping conducted by the Project in no way causes, or has caused, ecological damage to the protected areas, nor does it affect potable water resources or endanger wildlife or natural habitats. Management shares the view of the Requestors that the Cotacachi-Cayapas Ecological Reserve is a precious area of bio-diversity that requires special care and attention,”* and that *“[b]ecause of its unique bio-diversity, special care was taken during the mapping activities not to disturb the unique flora and fauna. Teams were brought in by helicopter so as to avoid the need to cut pathways through the forest. When overland travel was necessary, river and stream channels were followed for the same reasons. No chemicals or noxious substances were used in the research....”*¹³⁴ In fact, Management states, the letter dated 20 October 1999 of CEDENMA, an umbrella Ecuadorian environmental NGO, which is appended to the Request, acknowledges that *no environmental damage or destruction has been caused by the thematic mapping activities.”*¹³⁵

115. Management contends that, in any event, the potential consequence of releasing the information is a matter of speculation and that, in any case, the authority and

¹³⁰ Id., at p.6 § III.

¹³¹ Id., at p. 2, § IV.

¹³² Management Response, *supra* note 6, at § 39.

¹³³ BGM was established by the British Geological Survey (BGS) in partnership with the Ecuadorian Corporación de Desarrollo e Investigación Geológico, Minero, Metalúrgica (CODIGEM) in 1995. Its funding was provided by the Government of Ecuador, the UK Overseas Development Agency (ODA, now Department for International Development – DFID), and the World Bank.

¹³⁴ Management Response, *supra* note 6, at § 20.

¹³⁵ Ibid. See also CEDENMA's letter attached to the Request.

responsibility for publishing the information rests with the Government of Ecuador and not with the Bank.¹³⁶

116. In several paragraphs of the Response, Management contends that protected areas, and specifically the Cotacachi-Cayapas Ecological Reserve, were included under the thematic mapping component because there was a seemingly absolute prohibition of mining activities in these areas. For example, paragraph 10 states that “[i]n the case of this Project, **as an outcome of the appraisal mission, it was specifically decided to thematically map protected areas, even though mining would not legally be permitted in those areas, precisely because of the environmental data such mapping would generate and the fact that it could be done at nominal marginal cost.**” (Emphasis added)
117. In fact, the MOP when describing the “Criteria for Granting Concessions...” states that “*mining is not permitted within the National Forest Patrimony and protected areas, nor in zones adjacent to or less than 50 km from international boundaries (although the law establishes specific procedures and requirements to allow mining in such areas under special circumstances).*”¹³⁷ (Emphasis added)
118. To the Requesters’ claim that the PRODEMINTA Project would violate their security and their constitutional right to live in an “*ecologically balanced environment guaranteeing sustainable development,*”¹³⁸ Management responded that such an argument, inter alia, “*ignores the Ecuadorian environmental regulations, which prohibit mining in protected areas.*”¹³⁹
119. Management also describes one of the possible outcomes of thematic mapping as follows: “[b]ut, even assuming that a mineral deposit is found, the law of Ecuador classifies the Cotacachi-Cayapas area as an ecological reserve. Under Article 87 of the Mining Law, exploitation activities in Ecological Reserves are not permitted.”¹⁴⁰ Furthermore, “Article 19 of the environmental regulations for mining activities in Ecuador, which were developed with the assistance of the Project, specifically prohibits any mining activities in “national patrimony protected areas.”¹⁴¹
120. After the Response was submitted to the Panel, Article 87 of the Mining Law was repealed by the so-called “Ley Trole II.”¹⁴² Both the Requesters and Management made several submissions to the Panel about this. In short, the Requesters stated that

¹³⁶Management Response, *supra* note 6, at § 50.

¹³⁷MOP, Annex 8, at § 2.

¹³⁸Request for Inspection, *supra* note 17, at § 5 (VI).

¹³⁹Management Response, *supra* note 6, at § 16.

¹⁴⁰*Id.*, at § 23. In fact, Article 87, after banning the Government from promoting mining activities in reserved areas, provides that, for undefined “*reasons of national interest*”, these activities may be exceptionally permitted, subject “*to compliance with the provisions of this law and its regulation.*” In spite of statements in the main text, footnote 8 of the Response acknowledges this fact.

¹⁴¹*Ibid.*

¹⁴²Ley para la Promoción de la Inversión y la Participación Ciudadana, (Law to Promote Investment and Citizen Participation) published in the Official Registry on August 18, 2000.

the repeal of article 87 was an outcome of the PRODEMINCA Project that showed the Government and Bank's intention to open protected areas to mining activities. Management assured the Panel that the prohibition of mining in protected areas continues in force because the Environmental Regulations for Mining Activities still "*clearly prohibit*" mining activities in protected areas¹⁴³ and because there are other laws, especially the "Ley de Gestion Ambiental," that would contain similar provisions.¹⁴⁴

121. The Panel is of the opinion that Management has failed to demonstrate its claim that, for **legal reasons alone**, it would not be possible to use the information produced under the Geo-information component to initiate mining activities in protected areas. There is no doubt that Ecuador's legislation has established a number of restrictions and conditions for any possible exploitation of non-renewable resources in protected areas.¹⁴⁵ Management, however, has not provided evidence showing the existence of an absolute legal prohibition of mining activities in these areas.
122. The Panel wishes to note, however, that during its visit to Quito, Cabinet level officials of the Ministries of Environment and Mines and Energy expressed the Government's commitment to prohibit any mining activities in protected areas. In fact, the Government did send Congress a bill of law reinstating Art. 87 of the Mining Law. The draft of this bill of law had been discussed and incorporated comments made by local NGOs. Apparently, however, because of other mostly unrelated provisions, Congress did not approve this bill of law. The Panel has been informed by the Bank that the Government's intentions are to issue a Regulation and to submit to Congress a new bill of law to this effect.
123. Moreover, during discussions, Project Management informed the Panel that relevant maps would show the boundaries of protected areas and would indicate that no mining activity would be permitted in these areas.
124. **The Panel did not find any evidence to support the Requesters claim concerning Management's alleged acquiescence to the repeal of Art. 87 of the Mining Law. On the contrary, the record shows that Management has, on several occasions, expressed to the Government its concerns regarding the real or perceived consequences of the repeal of Art. 87.**

¹⁴³It should be noted, however, that according to Ecuador's Constitution a Regulation cannot amend or contravene the laws of the country.

¹⁴⁴Ley de Gestion Ambiental (Environmental Management Law) No. 37 published in the Official Registry No. 245 of July 30, 1999. Article 6 of this law provides, however, that "*the rational exploitation of non-renewable natural resources within the State's natural protected areas and fragile ecosystems,*" as dictated by the national interests, "**may take place by exception**" and only after an economic feasibility study and an assessment of environmental impacts have been carried out. (Emphasis added)

¹⁴⁵Aside from the legislation referred to elsewhere in this Section, there are a number of other Laws and regulations on this subject, including, inter alia, the Law of Prevention and Control of Environmental Contamination (No. 374 of May 21, 1976), the Water Law of May 18, 1972, and the Law on Protection of Biodiversity of September, 1996. In addition, Ecuador is a signatory of many international conventions and agreements on the protection of biodiversity and natural resources.

125. **The Panel did not receive any evidence to support the Requesters' claim that the Cotacachi-Cayapas Ecological Reserve suffered substantial or permanent damage as a result of the sampling activities carried out under the Project.**

4.2. Relationship between Thematic Mapping and Mining

126. The relationship between thematic mapping and legal and illegal mining was studied carefully by the Panel and investigated during its field mission in October 2000. This was a challenging undertaking, since any possible linkage between the release of information generated by the Project, the actual use of such information with adverse environmental consequences, and Bank's fiduciary responsibility vis-à-vis its safeguard policies, is not at all direct or clear.
127. The Panel discussed the issue with several geological and mining experts.¹⁴⁶ In addition, given the highly technical nature of the issues involved, the Panel felt that it was desirable to retain the services of an independent consultant with substantial expertise on geological and mining matters, and to ask her to consider the Requesters claim that the release of the results of the thematic mapping would attract mining companies and produce multifold negative impacts on their society and the local environment.
128. Having considered this expert advice, and examined the evidence, it seems reasonable to conclude that the mineral maps alone, even in conjunction with the geochemical data, are insufficient in themselves to locate ore deposits. The geochemical data and the geologic maps could be useful reconnaissance tools in narrowing the search area for further exploration, especially when used in conjunction with other available maps, papers, and reports, but they should not lead directly to mining activity.
129. As for the release of the CD-ROM, another concern of the Requesters, the data provided are insufficient for locating an ore deposit but, again, they may help narrow the search area for more detailed exploration. In other words, the geochemical data and maps are a good starting point for further studies of the mineral potential of this region of Ecuador, but any interested company would have to do much more work, primarily detailed mapping and drilling, before any detailed exploration could begin. This would take considerable time and may cost millions of dollars.
130. During its field visits, the Panel encountered a wide range of views concerning the probability that the release of the information would lead to an influx of illegal, artisanal miners. They ranged from almost certainty that it would, to grave doubt that it would have any effect at all. Several of those interviewed, including some NGOs, made the point that even without the information contained in the CD-ROM being released, mining might take place anywhere in the country.

¹⁴⁶ In its analysis, the Panel also considered a submission from an Italian NGO, Campagna per la Riforma della Banca Mondiale, containing an analysis of the information generated by the PRODEMINCA Project.

131. In this regard, the best advice and evidence suggests that, while one can never rule out the possibility that someone could stumble upon a mineral deposit suitable for artisanal exploitation after the data sets are released, any resulting mining activity would be a coincidence and not a consequence of the data release.
132. On the issue of environmental degradation and loss of natural habitats, another concern of the Requesters, any mining activities involving the extraction of deposits of gold, copper, lead, and zinc, or non-metallic industrial and construction minerals, can lead to environmental degradation if proper safeguards are not taken. While modern mining methods can minimize the environmental impact, their use often depends on laws and how they are enforced. Lax standards and poor oversight can lead to serious environmental problems.
133. In addition to the maps and CD-ROMs, PRODEMINCA published in June 2000 a Manual of Exploration of Metalliferous Deposits in Ecuador and a series of five volumes entitled Evaluation of Mining Districts of Ecuador,¹⁴⁷ the Panel's attention was drawn to GIS Andes geological information system.¹⁴⁸ The information provided in the Manual of Exploration and Evaluation of Mining Districts is intended to enable mining companies to optimize exploration strategies and select new potential targets for metalliferous mineralization. While of great interest, it appears that this and other mining data that may exist and that could supplement the Project-generated data would not increase the likelihood of mining activities in the area. As regards to the GIS Andes, the best advice indicates that, while the GIS Andes Project is one of the best data repositories for Andean geology, it is lacking in much information for Ecuador and the data are intended for regional geologic studies.
134. It is perhaps self-evident that the availability, under license, of the geochemical information in the form of a CD-ROM from which, with appropriate equipment, maps could be generated, would assist those intent on potential mining activities in deciding whether or not to pursue prospecting and related activities in particular areas. Indeed, this is the intention of providing supplemental packets of information and handbooks. It appears, however, that many other factors would be involved in reaching such a decision and others would come into play before any actual mining operations might be initiated.
135. It should be noted also that, PRODEMINCA's draft standard license agreements¹⁴⁹ lay down strict conditions regarding the use and release of the CD-ROM's

¹⁴⁷ The Requesters did not make reference to these handbooks in any submission, nor were they brought to the Panel's attention by Management or by PRODEMINCA. Other sources of geochemical information on the area exist, most notably the GIS Andes, a homogeneous information system of the entire Andes Cordillera. While its value cannot be compared with that of the data generated by the Project, the significance of GIS Andes is that it shows that even without publication of the BGS/PRODEMINCA CD-ROM, geological and geothematic information relevant for mining exploration information is readily available and apparently without restrictions.

¹⁴⁸ GIS Andes - The Geological Information System for the Andes, The Mining Journal Books Ltd. (2000).

¹⁴⁹ PRODEMINCA provided copies to the Panel of its draft standard license agreements entitled: "Contrato de autorización de licencia de uso de información geoquímica no divulgada, obtenida como resultado del programa de cartografía de información geológica de la cordillera occidental de los Andes".

information. Further, just prior to the Panel's October 2000 field visit, the Ministry of Energy and Mines and the Ministry of the Environment in a Interministerial Agreement established a mechanism that includes the participation of NGOs and/or private sector enterprises in the monitoring of the use and application of the information generated under the Project.¹⁵⁰ The Panel views this as a very positive development, if carried out with appropriate resources and in a transparent and independent manner.

136. While the release of the CD-ROM and related materials on thematic mapping may assist both legal and illegal mining enterprises in deciding on whether or not to initiate operations in the Cotacachi-Cayapas area (or elsewhere in Ecuador), the probability that the release alone would lead to actual mining must thus be regarded as very small. In any event, both legal and illegal mining could in principle emerge in any part of Ecuador with or without the information contained in the CD-ROM or the other information produced under the Project.
137. The eventuality that the Project may come to cause harm (i.e. material adverse effects) to the Requesters is, in all likelihood, remote. First, the Requesters reside in an area that has been excluded from the thematic mapping sub-component (see Map) and, hence, no mining activity in the area could be regarded as a direct consequence of the Project. Second, Ecuador's legislation only permits mining activities in protected areas (such as the Cotacachi-Cayapas Ecological Reserve) by exception. Even when permitted, these activities are subject to strict environmental controls. In meetings with the Panel, the Government of Ecuador's mining and environmental authorities confirmed their commitment to prohibit any kind of mining activities in protected areas. Finally, officials of local Government in Ecuador (such as the Municipality of Cotacachi), representatives of civil society and local (such as DECOIN and CEDENMA) and international NGOs appear firmly committed to protect Ecuador's very rich biodiversity. In a positive sense, the present Request for Inspection is an example of this commitment.
138. **The Panel accepts that the geological and thematic mapping carried out under the Project is ecologically neutral and agrees that thematic mapping is generally beneficial for the country, as it increases its database of knowledge on its natural resources. It will also help identify areas that are sensitive and that could be excluded from mining development. As with any type of information with economic value, however, this must be carefully managed so as not to generate adverse social and environmental consequences.**
139. **Concerning the allegations of the Requesters, on the basis of the foregoing, the Panel finds the Bank in compliance with OPN 11.02.**

¹⁵⁰ "Acuerdo Interministerial" between the Ministries of Environment and Energy and Mines dated October 13, 2000.

Chapter 5

Project Supervision

140. The Requesters claim the Bank is not in compliance with OD 13.05 on Project Supervision, by including the following general assertion in the Request for Inspection: *“It is our view that the Bank has not monitored the PRODEMINCA project carefully enough, and that lack of control and surveillance has done harm to the parties involved (OD 13.05).”*¹⁵¹

141. OD 13.05 states that *“Project Supervision is one of the Bank’s most important activities.”* It adds that the *“main purposes [of project supervision] are: (a) to ensure that the borrower implements the project with due diligence to achieve the agreed development objectives and in conformity with the loan agreement; (b) to identify problems promptly as they arise during implementation and help the borrower resolve them, and to modify as necessary the project concept and design as the project evolves during implementation or as circumstances change (in this context, Bank supervision complements the borrower's implementation efforts and is one of the most effective ways in which the Bank provides technical assistance to its borrowers); (c) to take timely action to cancel a project if its continuation is no longer justified, particularly if it can no longer be expected to achieve the desired development objectives; to use the experience gained to improve the design of future projects, sector and country strategies, and policies;....”* It then goes on to outline *“...the Bank's normal policies, procedures, and responsibilities for supervising projects it finances.”*¹⁵²

142. Management rejected the Requesters claims by responding the following: *“Bank Management is of the opinion that supervision has been carried out in compliance with OD 13.05 from Project inception. The Bank task team has supervised the Project through frequent supervision missions, in many cases involving field visits, and in-depth evaluations at annual review meetings with participation of co-financiers and other agencies involved in Project implementation (Annex D); as well as through continuous written, verbal and electronic mail exchanges with authorities, Project Staff and consultants. The execution of the implementation plan as described in the Project MOP and agreed in the Loan Agreement-including the survey of protected areas-was carefully monitored. In addition, adjustments to the implementation plan have been proposed to the Borrower when required by changing circumstances or*

¹⁵¹ Request for Inspection, *supra* note 17, at § 4 (IV).

¹⁵² OD 13.05, at § 1. It should be noted that OD 13.05 is not the exclusive repository of Bank guidance on supervision of Bank projects. For instance, OD 4.01 (Environmental Assessment), Annex D, paragraph 13, states that *“EA recommendations provide the basis for supervising the environmental aspects of the project during implementation. Compliance with environmental commitments, the status of mitigatory measures, and the findings of monitoring programs are part of borrower reporting requirements and project supervision.”*

improvement of knowledge and understanding of specific situations (including consideration of the evolution of Bank policies). For example, the potential for the multi-use of the thematic information was further strengthened in September 1995 and budget and operational arrangements were adjusted to ensure that the quality and characteristics of data to be collected would be adequate to realize this additional potential."¹⁵³

143. The Panel reviewed a considerable number of documents concerning the supervision the Project. The Panel also obtained valuable information concerning the supervision missions in discussions with Bank staff, Government officials and people directly or indirectly involved in Project execution. The Panel found that frequent missions were undertaken and that there was considerable follow up by the Bank on outstanding issues. Moreover, it appears that the composition and scope of the missions evolved with Project requirements.

144. On the basis of the evidence reviewed, the Panel finds the Bank in compliance with OD 13.05.

¹⁵³ Management Response, *supra* note 6, at § 41.