

**The Inspection Panel**

**PROPOSED ARUN III HYDROELECTRIC  
PROJECT**

**and**

**CREDIT 2029-NEP**

**INVESTIGATION**

**Report**

**June 21, 1995**

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## **1. Prior IDA Experience with Hydroelectric Projects in Nepal: Resettlement**

1. IDA places emphasis on its staff and its borrowers learning appropriate lessons from one project to another. Indeed, the 1994 Bank-wide review of resettlement referred to a “Bank decision that the Bank will not finance any new project involving resettlement for a borrowing agency that is not living up to its existing commitments for resettlement in an ongoing project.” For this and other reasons, the experience in Marsyangdi is an important baseline for viewing compliance with policies in energy projects in Nepal. The most recent experience before Arun III between Bank staff and the question of applying resettlement policies in Nepal occurred in the context of the Marsyangdi Hydroelectric Project (1984), Credit 1478-NEP. This project was not very extensive in impact, a 69MW facility, with over 200 families affected by the acquisition of land. The project documents negotiated between IDA and HMG/N included very specific requirements on resettlement, particularly in Section 3.07 of the Development Credit Agreement, in order to ensure compliance of the project with IDA’s policy on resettlement as described in OMS 2.33. The most specific criteria was that the borrower adopt and implement a resettlement program satisfactory to the Bank by January 31, 1986.

2. This requirement was laid on the borrower despite the fact that the borrower’s legal code for land acquisition did not conform to IDA policies on resettlement. In a variety of ways, IDA insisted on broader application of compensation and rehabilitation than was understood by the legal framework in Nepal. And the plan for compensation went far beyond the practices for road construction then prevailing in Nepal.

3. The early supervision reports of the Bank indicated concern about the ability of the borrower to meet that requirement. Indeed, in March 1986, the borrower was already out of compliance, and was given a new deadline of 30 June 1986. By the time of the next supervision mission report in July 1986, the mission was able to note receipt of a three-page letter from the Marsyangdi Project Manager outlining his approach to the issues, but considered insufficient by the mission experts. At that point, virtually all the land had been taken for the project. As a result, the effect of the required plan would be mitigative at best, rather than pre-emptive. The borrower was given a new deadline of 31 August 1986.

4. The following supervision mission, in late October 1986, found that nothing had been done. The mission brought a resettlement specialist along to conduct the review of the borrower’s planning, and to assist the borrower in improving the analysis of those being affected by the project. He provided extensive details about the creation of a viable resettlement and rehabilitation plan, e.g., the existing census looked only at landowners, and not at tenants; the need to differentiate between seriously- and marginally-affected people; the need to identify common or public areas that were acquired; and the need to provide assistance to communities where significant numbers of the displaced choose to settle. Indeed, the conclusion of Bank staff at that time was that the general policy of the borrower on resettlement “falls short of Bank policy on resettlement.” The mission also

stated that the project executing agency was not staffed to carry out the work, and urged that consultants be retained to provide strong support. The borrower chose not to pay for this additional work, and requested that the Bank provide additional funding. By February 1987, all reports indicated no progress.

5. A review by the Bank in May 1987 was rather more concerned about the project as a whole: NEA's compliance with the agreements reached in prior reviews was described as "extremely poor." This was followed by a statement in July 1987 to the Bank that "the above consultants would not be asked to develop a resettlement action plan, as the project does not envisage the resettlement of persons affected by the acquisition of their land and homes on top of the compensation paid them in accordance with the prevailing rules and regulations of HMG/N." Bank staff were clearly puzzled about how to go forward, given the lack of documentation to help in determining what exactly had transpired to date or in determining a course of action for bringing the project into compliance with covenant 3.07. Management was struck by the divergence between the technical expertise employed in the resettlement component of the project and the actual building of the dam, tunnel, and powerhouse and far from being in compliance with Bank guidelines on resettlement. Again, the Bank urged hiring a consultant team locally to come up with a Plan, such hiring to be done by 1 April 1988.

6. By the middle of the summer, no consultant had been hired yet. By August 1988, the implementer was reported as seeking bids. In fact, the consultant firm was finally chosen in the fall, and started work. Prior to its supervision mission of May 1989, the Bank received a draft Action Plan Report to review. It needs to be recalled, however, that the hydroelectric project was due for commissioning in September 1989. It became a race as to whether the project would be completed before the resettlement plan would be approved. The draft Action Plan did need additional work according to Bank staff: a more rigorous methodology, a budget, a schedule for implementation, and a clearer definition of beneficiaries. The deadline for the Action Plan was 30 June 1989, and the borrower was requested to include costs of implementing the Action Plan in the next fiscal year budget.

7. The hydroelectric project was completed well in advance of the resettlement plan. The Action Plan was reported completed by the supervision mission of December 1989, and at this time the burden of paying for implementation was shifted to the Bank (presumably through the follow-up sector-wide Power Project). The Plan identified a significant pool of families affected by the project -- indeed already adversely affected by virtue of their remaining landholding being too small. After much negotiation, that number was reduced to 21 families as "seriously affected." The consulting firm then returned to the drawing board to establish what measures should be taken. In early 1992, the supervision mission could report that the final recommendation focused on a combination of training and employment for those 21 families.

8. The Marsyangdi project was completed without compliance on resettlement, or as one Bank assessment summarized the results of the resettlement effort: "Covenant, but not followed. Consultant plan included provisions, but never adopted under project."

## **2. Resettlement in the Arun III Access Road Credit**

### Background of the Project.

9. The project, appraised in 1988 and presented to the Board in 1989, consists of the access road to the future dam site for the Arun III hydroelectric development scheme. It was presented as a separate project in order to accelerate the construction of the dam itself when the latter civil works would be ready for appraisal and approval by the Board. The construction of the road was intended to begin in October 1989, and thus allow for transport of construction equipment to the dam site in early 1992. Together with the hydroelectric works, this project was part of the government's least cost electrical generation plan developed with Bank assistance, and was initiated prior to completion of the Marsyangdi hydroelectric scheme in order to meet Nepal's electricity needs and potential sales of surplus power to India in the late 1990s.

10. This alignment of the road was a difficult issue to resolve in the history of the project. There is no "natural" route for a road in a watershed with such steep hills and unstable topography. When the IDA credit was finalized, the Hill route chosen actually represented a shift from the plan laid out by the feasibility study of 1987 funded by the Japanese International Cooperation Agency, which planned for the road to follow the river alignment to the powerhouse and dam site. The road funded by this credit became known as the "alignment," for the most part linking up existing towns along the ridges from the existing road head at Basantapur (a gravel road funded by Overseas Development Agency ("ODA")) to the construction sites up the valley.

11. The borrower in this case was the Kingdom of Nepal, with the beneficiary being primarily the Department of Roads, Ministry of Works and Transport, and secondarily the Nepal Electricity Authority ("NEA"). The credit was SDR 24.4 million (US\$32.8 million equivalent), the estimated cost of the road for which actual bids had not yet been received in the rush to approve the credit before the end of the fiscal year. The principal purpose of the project, justifying the cost of the road in this remote area, was to provide access for personnel, material and equipment to the up-river construction sites of the Arun III project.

### Building Capacity for Resettlement Management

12. The second stated objective of the project was to "strengthen HMG capabilities to administer rehabilitation of families affected by the project and manage environmental protection and conservation measures;" (Staff Appraisal Report, p. 12.) As a result, it was important to development of a satisfactory project that all provisions of OMS 2.33, Social Issues Associated with Involuntary Resettlement in Bank-Financed Projects, be fulfilled. The project included not only a Land Acquisition, Compensation and Rehabilitation Plan (ACRP) with program elements costing \$1.6 million, but also consultancy services for preparation and supervision of the ACRP to cost \$1.2 million. \_

13. As already stated, the policy context for resettlement in this project was OMS 2.33, since the succeeding OD 4.30 on Involuntary Resettlement was not issued until June 29, 1990. At the same time, the new OD was under constant internal review at the time of design of this project, and so the Task Manager and his colleagues were aware of Management's guidance in the new OD 4.30. In the substantial core of the new OD, there was in fact little change from the OMS 2.33. In some areas of the new OD, there was an improvement in language from the OMS, and in other areas, it actually became less precise. The Bank staff and consultants offering advice to the borrower in meeting this policy requirement were helpful in guiding the borrower towards language in the new OD, thereby reducing the likelihood of criticism of a project that would take some years to complete. But in spirit and major substance, the OD and the OMS were close to each other.

14. OMS 2.33 provides a succinct statement of the purposes of the policy: "When development projects require people to be relocated, the Bank's general policy is to help the borrower to ensure that, after a reasonable transition period, the displaced people regain at least their previous standard of living and that, so far as possible, they be economically and socially integrated into the host communities. Planning and financing the resettlement should be an integral part of the project, and the measures to be taken in this regard should be clarified before, and agreed upon during loan negotiations." (para 2)

15. The OD thus creates a series of tests for compliance:

- o Does the project adequately recognize the range of economic, social and environmental problems that will affect people displaced by the project?
- o Does the project deal with the "long-term" nature of the hardship and damage it may cause?
- o Are the measures appropriate?
- o Are the measures carefully planned and likely to be carried out?

16. Implementation of the policy has required the Bank to address the question of defining a "resettled person" or "displaced person". In this case, particular attention had to be given to the question of which families were "seriously" affected or displaced. The struggle between IDA Management and the borrower over this practical issue continues. The OD notes that "particular attention should be paid to the needs of the poorest groups to be resettled." Later, at paragraph 16, it notes that "Vulnerable groups at particular risk are indigenous people, the landless and semilandless, and households headed by females who, though displaced, may not be protected through national land compensation legislation. The resettlement plan must include land allocation or culturally acceptable resources and earning opportunities."

17. Does the resettlement plan adequately recognize the losses of families in the area of the project? The OD spells out the fact that “some types of loss, such as access to (a) public services; (b) customers and suppliers; and (c) fishing, grazing or forest areas, cannot easily be evaluated or compensated for in monetary terms. Attempts must therefore be made to establish access to equivalent and culturally acceptable resources and earning opportunities.” In the case of the Arun III access road, for instance, the effect upon the entire portering business and established markets is very substantial; yet the question of dealing with those effects has been entirely swept into the Regional Action Plan.

#### Treatment of Seriously Affected Families.

18. Some observers have dismissed the scale of the resettlement problem in the Arun case. Relative to the Narmada experience, or most other South Asian projects, the number can seem trivial. But that is not the test for IDA policy. In OD 4.30, the question of scale is addressed in paragraph 4, where reference is made to “large-scale population displacement.” The number used is a negative reference “...a few people (e.g., about 100-200 individuals)”. This is substantially less individuals than the approximately thousand families losing land in the Arun III project which means the issue has to be seen as a serious compliance challenge. Indeed, in compliance with this, a formal plan was required, and has been provided by the Borrower in the case of both the hill route Credit and the proposed credit, and have been and will be examined for acceptability by IDA.

19. Underestimation of numbers affected is common in projects. As pointed out in one Bank study, “Surveys carried out in the early stages of the project usually covers only those who are directly affected by loss of property or who are “displaced” and it is only much later other forms of impact is recognized.” In the case of Arun III, the loss of jobs and traditional markets will be wide-scale with thousands of families “seriously-affected” without losing any land at all, since the land is only one source of income. Nevertheless, in this case the Board requested the Panel to look only at losses due to the taking of land. By specifying a focus on “seriously affected families,” the Board has created a category that does not exist in OD 4.30, and indeed, is not addressed in the current principal Bank guide to the subject, Resettlement and Development (1994). The policy, on the other hand, appears to state that all losses are to be taken seriously; the construct of “seriously-affected” families as one category in the road projects seems to be a compromise with the borrower to limit the application of the extensive provisions for resettlement to a minority of those losing land.

#### Monitoring and Evaluation.

20. These issues in the resettlement process are given extensive attention in paragraph 22 of the OD. It lays down a range of needs, such as supplementation of in-house monitoring capacity with independent experts. It states that “the borrower should be required to continue impact evaluation for a reasonable period after all resettlement and related development activities have been completed. The borrower should also be required to inform the Bank about the findings.” It is a recurrent theme of memoranda from resettlement experts in the 1992-1994 period that IDA needs to provide very substantial independent oversight in order to improve the likelihood of compliance with

policies during implementation. Indeed, it might be reasonably argued that Nepal has been a laboratory for ACRPs in the Arun Valley that are widely admired for their design, but with inadequate attention to solid implementation. But in the wake of the Wappenhans-led efforts, such a conclusion would not be surprise to anyone, including people within the Bank.

22. Responsibility for resettlement, according to paragraph 6 of OD 4.30, “rests with the borrower.” Nevertheless, it is also clear that IDA is responsible for assuring compliance with OD 4.30. The Staff Appraisal Report and the Memorandum and Recommendation of the President have to certify that the borrower’s plan do comply with IDA policy requirements. Between those two kinds of responsibility, the reality is that “ownership” of the resettlement issue is hard to find. According to a Bank review in 1993, “few countries have demonstrated their commitment to the principles and objectives of resettlement articulated in OD 4.30. Equally few Task Managers are convinced about its importance, necessity, and viability.” Against that background, it is necessary to be careful in assessing the real progress made in the Arun III project. With regard to supervising the Credit 2029-NEP, for instance, the borrower indicates that it filed three reports on the ACRP issues between 1988 and 1990, and yet there is no record yet found of those reports being scrutinized by IDA.

23. The core issue is made clear by all Bank reviews: as the 1994 Bank-wide review stated, “The ultimate test of consistency between resettlement operations and policy is income restoration and improvement.” The test is not land, and it is not a short-term process. It reinforces the point that “very few projects have included sufficient measures or methods to assess whether income restoration is being achieved.” The review goes on to say that “land-for-land” is central in rural areas, but in this case where crop-based income is projected to decline drastically (see the KMTNC studies), the sources of off-farm income are as important.

#### Women and other Vulnerable Groups.

24. The policy gives special attention to vulnerable groups, along with the importance of using the resettlement frameworks to both shelter and promote the development of those vulnerable groups. Women and children can easily suffer within the household framework when cash is monopolized by men and used for conspicuous consumption. In that sense, such vulnerable parts of the population become separate classes of “seriously-affected” people too often invisible to monitors without the survey tools to see their losses. Current state of the art surveys of household welfare can disaggregate the condition of women, in order to ensure they are not silently penalized by the compensation system that does not take them into account. In the case of Vietnam Highway Rehabilitation Project, 30% of training funds were reserved for women. In the case of the Arun projects, only token attention is given to women, and then in the context of the Regional Action Plan, not the ACRP.

#### Compensation.



25. “Delays in payment of compensation leads to erosion of the value of the moneys received. ... In fact, the norm in Nepal is government taking possession of land prior to the completion of the valuation process, thus removing any incentive for government officials to promptly pay compensation due.... On the other hand, experience has shown that compensation payments received too far in advance of the actual physical move are either squandered or snatched up by money lenders.” With regard to types of compensation, “Bank experience with compensation exclusively in money has been negative.... The need for forms of compensation other than cash is most apparent in the case of tribal or other minority populations whose ancestral lands are expropriated by the State.” From virtually all writings, it was essential for IDA to insist on adequate non-cash compensation in the Arun Valley, and yet when the land was acquired on the Hill route, the only compensation identified so far was cash -- no land, no jobs, and no training. The risk is that the same tragedy could emerge in the valley route as well.

26. One aspect of importance borrowed from the OD 4.30 was the scope of the policy. The OMS applied to hydropower and irrigation projects. The new OD was stated to broaden the treatment of resettlement to all types of investment projects, which had already become the *de facto* policy of the IDA. In one sense, this credit was a road project, and yet it had no viability except as part of a hydropower project. IDA showed good sense in recognizing that, whatever its categorization, this was a project that would require the resettlement of a substantial number of people, and that the benefits of the policy needed to be gained for the project from fair treatment of those being substantially affected by the construction. Management is ambivalent about whether they applied the OMS or the OD to this project. It could be argued only OMS 2.33 applies, but in fact, the staff did everything possible to apply the progressive thinking of OD 4.30, and to good purpose. The Bank can take credit for having applied the substance of OD 4.30 to the design of this road project when there would have been legal shelter not to do so.

27. Road projects in Nepal were not known in the 1980s for taking a developmental interest in those displaced by construction. While a legal framework existed in Nepal for the involuntary taking of land for government projects, it was narrow in scope, and was of sufficiently little value to owners and tenants that most issues of compensation were simply settled administratively. Protests and appeals were virtually unknown. Land-owners tended to be grateful for whatever they received, as opposed to feeling they had true legal recourse to ensure fair treatment. This was particularly true in remote hill and mountainous areas where the local authorities were not operating in a democratic framework. The first Land Acquisition Act was passed in 1956, with subsequent revisions. When the legal framework was examined in the course of designing this project, Bank staff found it to be manifestly inadequate for meeting OMS 2.33 (especially with regard to informal tenants and the landless, and the determination of compensation levels across the board), and successfully pressed the borrowing government to issue special-purpose “guidelines.” As we shall see below, the government argued that it could not alter its underlying framework for land acquisition without jeopardizing a host of projects funded by other donors. Instead, the Bank and the government compromised with ad hoc guidelines, unique in Nepal’s history at that time. The government was

careful to ensure that the guidelines did not apply to other development projects, but the Bank staff felt they had established a precedent for subsequent projects in that country.

28. Resettlement in Nepal has been both spontaneous and government-directed during recent decades. From the 1950s until the 1970s, the government's policies and its Nepal Resettlement Company relocated large numbers of farmers to the lower elevations of the country -- the Terai region -- and the policy of encouraging such movements was reversed only in 1985 when the adverse environmental consequences of such large-scale shifts were recognized. The history of such resettlement was not particularly happy from the farmers' point of view, either -- with maladministration common and a lack of follow-through in ensuring land rights and extension services as farmers moved into new territory. These difficult precedents are cited as reasons for the farmers along the Arun road construction being reluctant to take up the offer of "land for land" instead of cash. Their experience with the government arranging such swaps was not positive. Indeed, the government's own experience was such as to discourage its senior managers from taking up an active role in resettlement in the Arun Valley. Even where landholders were seriously affected, the government's instinct was to award cash more generously than usual, rather than become involved in relocating families to new land.

29. In the light of such experiences, it is important to recognize the issues at stake in the Bank laying out as a major goal of the project to strengthen the government's capacity to manage rehabilitation of displaced families. All parties agreed that its capacity would have to be not merely improved considerably, but almost built from the ground up, to be able to carry out the Bank's objectives in resettlement; the question was whether such capacities could be established quickly enough to have impact on this project.

#### IDA Compliance with OMS 2.33: Appraisal Phase.

30. The provisions of OMS 2.33 are quite explicit about the need for extensive early planning for resettlement issues. Whenever people are to be displaced, the borrowing government must have a resettlement plan, however brief or extended. The nub of the plan, as it would be stated similarly in the follow-on OD, is that "settlers are afforded opportunities to become established and economically self-sustaining in the shortest possible period, at living standards that at least match those before resettlement." (para 18) IDA policy is not prescriptive about how to achieve the desired outcome, but it does demand a clear path to achieving such an outcome for those whose land is taken. The second major area of emphasis in the OMS is that of compensation -- both in terms of insisting on a broad definition of what assets deserve to be recognized in calculating compensation, and ensuring that replacement value is taken into account, as well as dictating the means: experience "tends to show that payment of cash compensation alone is often a very inadequate strategy for dealing with the displaced." (para 19)

31. Timing is all-important for the policy. "Planning for resettlement should begin as early as possible." Indeed, "completion of detailed resettlement planning is required before the negotiation of the project loan." (para 21) To emphasize, the OMS does not allow flexibility on this issue. The plan must be completed before negotiations can take place. The sequencing is quite clear:

o At the time of project identification, the magnitude and nature of resettlement must be identified, past experience should be reviewed, and the basic legal framework has to be reviewed “at this stage.”

o At the time of preparation, resettlement components must be developed at the same pace, with involvement of many disciplines, in particular sociologist/anthropologists and resettlement specialists. Design and schedule have to be completed before the appraisal mission, in order to assess various resettlement options.

32. The Hill route project began badly in terms of compliance with OMS 2.33. The pre-appraisal mission in October 1987 found that the project was moving towards appraisal without a clear understanding of how many people would be affected by the road, and without a plan from the borrowing government for dealing with the issue. Indeed, the thrust of the report of the pre-appraisal mission was that the government should be encouraged to move the people quickly so that they would not be in the way of construction machinery, and no mention of rehabilitation. Indeed, the alignment of the road was not yet set, and therefore it would not be possible to determine the number of people affected until the road alignment was set at the appraisal stage. The Task Managers were warned at that time, that compliance with the provisions of OMS 2.33 regarding furnishing the Bank prior to appraisal with a proposed R&R plan appeared not to be feasible. In its determination to get construction underway by November 1988, the careful steps laid out in OMS 2.33 were being telescoped into the period between appraisal and negotiations.

32. The Bank postponed further work on resettlement until the appraisal mission would examine this issue, and in the event that substantial resettlement is required, HMG/N would then be requested to formulate a plan for resettlement of displaced families and for compensations to farmers. This, then, was a project being rushed to appraisal (target February 1) that did not have a final road alignment, did not know how many people would be displaced, and the government had not begun drafting a plan required in any case.

33. Others in the Bank expressed uneasiness over the approach being taken. There had not yet been any plans for including a resettlement expert in the pre-appraisal or appraisal mission despite an offer made in late January. The approach laid out in para 22 was not acceptable to many -- that measures would be taken only if “substantial resettlement is required.” It was pointed out that the steps for compensation and rehabilitation have to be taken regardless of the number of families involved. Nevertheless, the Task Managers continued to attempt to minimize the issue. In March 1988, they reported that it was likely that few if any households would be physically displaced by the selection of the road alignment. This is surprising since the road alignment was not set. Later that same year, the initial estimate of the number of families to lose land would be set at 2,355 families, certainly not within the plain meaning of “few, if any.” Dissent gave rise to good sense, and it was finally agreed that an assessment of the impact of land acquisition and the development of an appropriate action plan would be conducted in conjunction

with the ongoing detailed engineering financed under the TA-2 Project (Cr. 1378-NEP). This stimulated considerable discussion. The outcome was to devote greater attention to this and environmental issues. This activity which was to be carried out by the engineering consultants (Scott, Wilson, and Fitzpatrick) and was due to be completed by September 1, 1988, to enable the Bank to complete the appraisal of the Access Road Project according to OMS 2.33.

34. By May 1988, the issue of resettlement was making limited progress. The Department of Roads and the Land Department had engaged local consultants to survey those living along the prospective road alignment. IDA was prepared to propose to the borrower that an Environmental Unit be set up in the Department of Roads to oversee all environmental and resettlement issues. Oddly, in Bank discussions of experience with ongoing projects with Nepal at this time, there was no citation of problems in the Marsyangdi project under construction, where the same borrowing government was resisting all efforts to implement a rehabilitation plan for resettled families.

35. For reasons already cited, however, the project was not in compliance with OMS 2.33. After much consideration, the Legal Department's view was that safeguards were built into the conditions for going to negotiations; for that reason, Legal did not object to granting an exception to the procedures outlined in OMS 2.33.

36. The question of applying OMS 2.33 did not appear to enter active discussions with the borrowing government until IDA forced the issues in the post-appraisal mission in late May 1988 to examine environmental and resettlement problems in the road project. It became clear to the IDA team that the government did not intend to depart from existing Land Acquisition Acts, and that it did not want expatriates involved in the land compensation issues. A range of issues within the resettlement agenda bubbled to the surface at that time, including the process of valuing land, whether the government anticipated providing anything beyond cash, whether they intended to offer a real land-for-land option, and whether they recognized that some families were more seriously affected than others. In the follow-up letter to the Minister of Finance, IDA Management attempted to make it clear that the issuance of regulations to conform to OMS 2.33 would be essential to move to project negotiations.

37. Compensation became a sticking issue, affirming what the Bank-wide reviews of resettlement in all projects had stated: that landholders rarely received compensation sufficient to restore their standard of living, and that governments tend to rely on outdated, understated estimates of land value. The government was deeply concerned about this, arguing that any change to "replacement value" from "fair value" would cause financial difficulties for all the other road projects in Nepal, whether locally-funded or donor-funded. These represented basic disagreements between IDA and the borrower. There then ensued extended discussions over compensation to tenants (particularly informal), and with regard to families seriously affected by land loss, a clear split developed. The initial proposal from the IDA staff to the borrower was that seriously affected families would be "those losing more than 25% of their main source of income"- a fairly standard practice at that time in Bank projects, and a standard that has been

strengthened since then. The borrower never accepted that proposal. IDA also argued that the provision of land should be included as part of the rehabilitation measure.

38. When the borrower finally responded in negotiations in September 1988, the idea of new regulations for land acquisition and rehabilitation (as suggested by IDA) was rejected; administrative guidelines would be sufficient. The borrower also did not intend to fund any additional assistance needed to meet IDA policies -- payment for consultants, whether local or foreign, was taken from another IDA credit. In terms of actually completing the ACRP before negotiations, the borrower rejected that as well, promising only to send a draft of a "substantial part of the ACRP" to IDA for review before negotiations. IDA Management accepted these points, again postponing the day of reckoning on these issues despite guidance to the contrary in the OMS.

39. When the borrower did submit draft ACRP guidelines in October 1988, it was clear that they could not possibly conform to OMS 2.33. Besides many minor points, the guidelines attempted to set a standard for seriously project-affected families (SPAFs) as those that lost at least 50% of their major source of income. This standard was twice as difficult for landowners to meet as that set by IDA practice elsewhere. In a part of the world where many families already live at subsistence levels, the idea that they would not receive special rehabilitation if they lost "only" 45% of their major source of income was surprising. Additional problems of major importance included the way of pricing assets, the amount of the rehabilitation grants, the time period for payment, the role of tenants, and others. In the larger context, other violations of the OMS were evident: the ACRP would only cover the first year, when the policy clearly called for a complete plan; in effect, the appraisal process was never completed by Management's own standards calling for a complete ACRP. The Bank told the borrower in July 1988 that a complete ACRP was a condition of negotiations; the Bank was abandoning the standards of the policy already.

40. Attempts to reach a common definition of a "seriously-project affected family" (SPAF) were creating serious problems. In October 1988, Management sought a compromise, where the focus was shifted to those families "left with inadequate holdings to at least maintain their standard of living before the project." Such an approach was a means of moving towards a somewhat more qualitative definition, and at the same time emphasizing to the borrower the importance of baseline surveys of all those affected in order to provide better rehabilitation. The Borrower appeared to accept that approach. Equally important, however, and particularly for SPAFs, was the view of the Borrower that it did not have to pay compensation for property before actually taking it for construction. Given the practice of many governments to take property first and pay later (sometimes much later), the Bank properly insisted that compensation be provided before possession.

41. Based upon these various discussions, the borrower returned to the Bank with a full set of draft Land Acquisition Guidelines, with apparently few of the verbal agreements of October-November 1988 included. The definition of SPAF had reverted to percentages, rehabilitation was weakened, the land-for-land provision became wishful thinking, and

the process of appeal became non-existent. The legal framework for the draft Guidelines had been “defacto repealed.” Bank staff sat down with the borrower in early December and wrote out the guidelines for the project, and insisted on their acceptance if the borrower wished to proceed with the project.

#### Negotiations and Board Approval.

42. Negotiations were held with the borrower in January 1989. Even after being negotiated, the road did not remain a fixed quantity. The road alignment was lengthened significantly after the conclusion of negotiations in order to meet various environmental tests and the need for a less demanding road for construction vehicles. Negotiations became a continuing set of decisions, changes, and amendments to the formal documents processed. In the rush to obtain funds from a particular fiscal year, the Staff Appraisal Report and related documents had to be circulated to the Board with approval from the borrowing government still pending. To ensure that the Guidelines developed for the project would be adopted as an integral part of the project, they were included in the SAR as Annex 7, along with the ACRP as Annex 8.

43. The Staff Appraisal Report created additional conditionalities with regard to resettlement, emphasizing that “it is a condition of effectiveness that a legal opinion be provided to IDA by the Secretary of Law and Justice confirming that provisions contained in the Guidelines are enforceable in accordance with the laws of Nepal.” (SAR, p. 20)

44. The project went to the Board for approval without construction bids in hand. It was a costly decision. The project also went to vote in the Board without an adequate plan to deal with indirect effects of the project. In May 1989, the King Mahendra Trust was just coming forward to address the Terms of Reference for the study of basin-wide effects of the road and power project -- ultimately producing valuable recommendations rendered moot on the Hill route by virtue of the borrower proceeding to land acquisition without those pre-emptive and mitigative measures in hand. The Board approved Credit 2029-NEP on May 30, 1989.

#### Oversight of Implementation.

45. The Credit was signed and became effective. The question then arose as to how much involvement from IDA management was appropriate for monitoring implementation. For the most part, at this stage, Management relied upon a resettlement specialist consultant to visit the project site occasionally, in the context of reviewing all the Bank’s activities in that country. The borrower was expected to file reports on acquisition, compensation and rehabilitation: the Government states that apparently three were filed, in December 1988, November 1989, and July 1990.

46. Implementation is taken very seriously in OD 4.30. “Resettlement components should be supervised throughout implementation. Supervision that is sporadic or left until late in implementation invariably jeopardizes the success of resettlement.”

Paragraph 31 closes with a somber thought: “Complete recovery from resettlement can be protracted and can often make it necessary to continue Bank supervision until well after populations have been relocated, sometimes even after a project has been closed.”

47. The first Bank oversight mission took place in November 1989. At that point the project had stalled with bids submitted that were too high and too few in number. All were rejected, and the borrower informed that rebidding could not take place until the economic situation was clarified. Both IDA and the borrower were preoccupied with the fact that the whole Arun III project approach had failed. Issues associated with the effective road credit took a back seat to the broader crisis of the project. Yet, in the meantime, the Department of Roads was taking measures under the existing credit. The Bank review found that survey work had continued and compensation had been disbursed under the acquisition, compensation and resettlement plan (ACRP) for approximately one-fifth of the property required for the access road. Since construction had not actually begun, however, families neither vacated their property nor received compensation for trees, crops or hardship. The Panel of Experts weighed in with their view that compensation ought to be expedited so that it would not delay the eventual road construction. The borrower clearly treated Credit 2029 as one to be executed.

48. The second oversight mission took place in July 1990. It included a resettlement consultant to supervise the land acquisition/family displacement/environmental aspects of the detailed engineering for the Arun III project, as well as examining the Arun-III Access Road (Cr. 2029-NEP) ACRP work already underway. The borrower was clearly anxious to get moving on the road work, even if there was not enough money in the existing credit to pay for the whole road. The borrower proposed building the first 40 kilometers, thus avoiding further delay in the project. The IDA mission tentatively supported this initiative, “especially since the ongoing land acquisition/compensation process has already provided initial payments for upwards of 40% of the estimated 2,000 access road project affected families and undue delay would complicate the situation in the field.” Again, resettlement issues demanded little attention. The project was going through another design crisis -- with a donors meeting in Katmandu at the same time, to consolidate the whole project into one bidding process. The access road continued to go forward: it was expected that disbursement of compensation for the land affected by the access road would essentially be completed by July 1991. No objections were made by the Bank.

49. By the time of the next supervision mission, in December 1990, a change in perspective was emerging in the oversight process. The attention of virtually everyone in the mission was in negotiating the design of the combined project yet to be put together and financed; tender documents were in preparation, and managers were rapidly moving towards prequalification of contractors. For IDA, the importance of Credit 2029-NEP was not in what was happening on the ground to farmers, but rather on the hurdles to be jumped in order to shift those resources into the new combined project. The borrower took a rather different perspective, and wanted again to begin spending the money, proposing that they be authorized to use some of the credit proceeds to procure camp

facilities and standard construction equipment. Despite the presence of a resettlement expert on the mission, the Bank raised no issues.

50. Documentation on subsequent supervision missions have not been reviewed. Nevertheless, staff interviews have made it clear that the Credit 2029-NEP was essentially forgotten, other than the legal/financial questions of how to restructure it so the money never disbursed could be devoted to the new, much larger Arun-III project.

51. It is not apparent that any problems with the implementation of the ACRP on the Hill route were identified through the supervision missions. On the other hand, independent studies by Bank consultants were increasingly raising questions about the impact of the resettlement policies of the implementing agencies. An early 1991 study by T. Ragsdale and A. Molnar, for instance, identified the sociological weakness of the Bank's approach on the Hill route. "One outstanding problem in the Arun case as well, however, is that many families have already spent the cash compensation on debts, unnecessary purchases, or subsistence needs and have been unable to reinvest in capital assets." The study became even harsher in its conclusions: "In light of the lack of field-level monitoring and evaluation that has characterized both the resettlement and land acquisition processes in Nepal, it is clear that the government is not learning the lessons of on-going experience with resettlement. More follow up in both of these areas in ongoing projects, such as the Arun III Access Road and Hydroelectric Project, is needed and much more emphasis and resources need to be placed on monitoring and evaluation."

52. Some of the most serious problems came to light only with the publication of the Environmental Impact Assessment for the Valley Route. (JV Arun III, "EIA for Arun Access Road -- Valley Route," September 1992) The JV had sent their sociologist to the Hill route some two years previously, to conduct an informal survey of what happened in the land compensation process on the ridge route. It turned out that the implementation process had definitely not enabled recipients to restore their standard of living to prior levels. Why? The largest use of cash compensation was to pay off existing debts. This was not by choice -- since the land was collateral for debts, creditors demanded immediate payment when cash was received. The second-largest use of cash was for marriages, funerals, and festivals. For those who wished to buy other land, they found that land prices immediately inflated, and asking prices for land were twice as high as they had been. Finally, there was tremendous confusion about the official procedures for making appeals, complaints or queries. (Ibid., Annex 4.13, pp. A4-35-36).

53. The greatest problem for those receiving compensation or facing resettlement on the Hill route was the decision in 1992 to shift the road alignment to the river valley. The impact on former property owners was catastrophic in a number of ways: (1) they had lost title to their land to the government; (2) the cash compensation they had received for title had been largely spent in non-productive purposes; (3) if the government were to attempt to follow the letter of the law, by offering the land to original owners at the price they were paid, they would not have the cash to regain the land, and it would be auctioned to others; and (4) the road would not go through their communities, thereby depriving them of immediate alternative income opportunities. On top of this, the



attention of IDA shifted entirely to the valley route, leaving them forgotten in an outlying area.

54. A modest degree of attention was given to this issue by the Bank's resettlement experts and by the project's Panel of Experts. One idea was to encourage the Asian Development Bank to create a loan fund for farmers to buy back their land, but nothing more was heard about that. In the Seventh report of the Panel of Experts, the problem of the people on the ridge route was taken up, and remedies urged before additional hardship was suffered by those landowners, but nothing was known to have been done at that time. Indeed, when the road alignment was shifted to the valley, and an environmental impact assessment undertaken, that report stated that "the JV's surveys during the summer of 1992 indicate considerable local concern over the possible loss of investment values if the Hill Route is no longer chosen." (JV Arun III, EIA, September 1992, vol. 1, para 3.4.12)

55. The issue remained unresolved. The borrower took no action. When the joint donors' mission visited Katmandu in May-June 1993, they made it manifest that the new combined project could not go to negotiations (scheduled for October 1993), without a clear policy regarding land already acquired along the hill access road alignment, especially with regard to land no longer required (as above Changkuti) or which HMG/N will use later. The government's commitment was to build two limited spur roads on part of the Hill road alignment, but at some distant time in the future when much of the damage to communities would already be done, and resolution of the unused areas was not accomplished. The new government, in the spring of 1995, decentralized the issue to the local villages, providing them with block grants to cover all local needs, including presumably the resources to build the spur roads. Local village heads consulted by the Panel indicated a strong interest in following through at their own initiative with the spur roads, but also indicated that there was tremendous competition for those block grant funds from needs in health, education, water, and so forth.

56. After the Inspection Panel raised this issue in its preliminary review in December 1994, Management stated that a commitment was forthcoming from the borrower to re-sell the land to the original owners, as provided under the laws of Nepal.

57. Instead, the Government sent a letter to the Bank on April 5, 1995, outlining a policy for the landholders on the Ridge Route, allowing them to retain use of the land indefinitely irrespective of their title to the land, that did not satisfy the Bank's requirements laid out above. The Government offered no further assistance to those landholders.

58. As the Requesters had submitted to the Inspection Panel, the resettlement issue on the Hill Route had suffered abuse by neglect. Substantial damage to the interests of the farmers on the Ridge Route had come first through an inadequate compensation system (cash only, and no rehabilitation) that manifestly failed to comply with the ACRP, and then secondly through relocation of the route to the valley, thus driving down the value of the remaining land of the farmers who had lost part of their acreage. Management in

their most recent mission make it clear that a time-bound plan for those farmers and landowners will have to be developed as part of the current credit.

### **3. Environmental Assessment in the Arun III Access Road Credit**

59. Four alignments were considered with the dual objectives of providing access for personnel, material and equipment to the hydroelectric project (dam and power house), as well as facilitating economic development in the Arun Basin by linking many of the existing towns, which are located primarily along the ridges. The Hill alignment, with a total of 197 kilometers, was chosen and justified both in economic as well as environmental terms. At that time a two-pronged strategy was followed by HMG/N: build the road under the responsibility of the Department of Roads and undertake detailed engineering and environmental studies for the hydroelectric project under responsibility of the NEA. The initial environmental studies leading to the road alignment for Credit 2029 were carried out by the Department of Roads of HMG/N in 1987, before either OD 4.00 Annex A: Environmental Assessment (October 31, 1989), or OD 4.01: Environmental Assessment (October 3, 1991) were in effect.

60. The Staff Appraisal Report for the Arun III Access Road (May 12, 1989) refers to the design and construction methods for the proposed alignment as environmentally “state of the art” for a major road project in Nepal. Paragraph 3.08 of the SAR states that the violence, destructiveness and unpredictability of the rivers in the area are the primary reasons for the choice of the ridge alignment: “The road has therefore been chosen to avoid rivers as far as possible, and to follow the contours closely in order to minimize the quantities of cut and fill, and to reduce negative environmental impact.”

61. Procurement under this project was not successful, as already noted. In 1992, HMG/N decided to shift to a one-pronged strategy to accelerate project construction by having both the road and hydroelectric project under one large contract for all the civil works, and under the responsibility of a single contractor. The entire responsibility for project execution was also shifted to the NEA.

### **4. Resettlement in the Arun III Hydroelectric Project -- Valley Route**

62. The shift from a two-stage project to a one-stage project did not at first involve a change in the road alignment. From the time of the failed bids in 1989, and the initiation of planning for one-stage bidding of the entire project, until 1992, the planning appears to have been remained focused entirely on the Hill route design. Nevertheless, when engineers began examining ways of reducing cost, construction time, and implementation risks, the shift towards a shorter route up the valley became almost inevitable. The proposal was developed rapidly in 1992, with a revisit of the Japanese-surveyed route

from the mid-1980s, an environmental review, a submission to the Panel of Experts, and agreement between IDA and the borrower that the new route alignment should be adopted.

63. Resettlement played its role in the planning for the valley route. Bank resettlement experts were brought into the planning process in late 1992, and fortunately the same people were involved who were familiar with prior experience in Marsyangdi and the Arun Access Road credit ridge route. The environmental impact assessment produced by the engineering consultants, JV Arun III, included a straightforward section on the need for revision of existing land acquisition guidelines as well as “issues arising from the hill route land acquisition and compensation process.”

64. The EIA identified a number of problems. To a degree, the authors were handicapped by the fact that the alignment of the Valley Route had not yet been laid out in the field, and so its analysis of resettlement was only an estimate. ACRP surveys had not yet begun, of course, and so their estimate of 640 families being directly affected would have to be confirmed later. However it was generally thought “that the families affected along the Valley Route are likely to be poorer on average than families along the Hill Route.” In other words, compensation and rehabilitation issues would be even more significant in their lives. For the EIA authors, “Limited data suggest that as yet the ACRP process is not sufficiently evolved to fully protect, compensate and rehabilitate families affected.” (EIA, vol. 1, para 4.3.3.2)

65. The analysis of the EIA drew extensively on the problems encountered already on the Hill Route. While applauding the design of the guidelines for land acquisition on the Hill Route, the EIA authors pointed out that reality had undermined their effectiveness. The guidelines were “based on the premise that resettlement of affected families to new land is impractical, mainly because, firstly, there is no new land available, and secondly, families do not wish to leave the area of their ancestral homes. Therefore, compensation is cash-based.” (EIA, vol. 1, para 5.2.2.1) As implemented, the guidelines fell short of meeting OD 4.30, according to the EIA, for a variety of reasons: (a) the majority of cash recipients spent their compensation on non-income producing expenditures -- farmers in that area were simply not accustomed to dealing with significant amounts of cash; (b) “the effect of ACRP on the Hill Route has been to inflate land prices far beyond the compensated value, thus making the purchase of replacement land impossible for most PAFs;” (c) delays between property valuation and the payment of compensation causes depreciation in purchasing power, aggravated on the Hill Route by the government allowing the farmers to remain on the land without title and thus able to maintain their income level temporarily; and (d) the general level of understanding of the compensation arrangements was low, especially in the case of SPAFs, for whom additional compensatory measures were envisaged. The EIA then came up with a list of twelve substantive recommendations for improvements in the land acquisition guidelines and the ACRP for the Valley Route -- many of them focused particularly on SPAFs.

66. Under IDA policies, a draft ACRP was required before appraisal of the project. In December 1992, it was pointed out that the appraisal mission was scheduled for March

1993, and yet the borrower had effectively not begun to do appropriate work on an ACRP. The problems of meeting IDA policies were extensive:

- (a) The legal basis for applying the Land Acquisition Guidelines to the elements of the project other than the road did not exist;
- (b) There were three different ACRP teams, each operating according to different methodologies;
- (c) There was no single contact point in the project for families that would be affected;
- (d) There was no indication that land for land existed as an option, even though 16% of the families indicated a desire for such a compensation transaction;
- (e) The appeals process on the Hill Route never operated appropriately, and there was no indication that the borrower intended to do better in the Valley Route;
- (f) There was no suggestion that the project planned to offer seriously the other forms of rehabilitation for SPAFs, such as jobs or training, essential for restoring their standards of living according to IDA policies.
- (g) It is not clear that any measures were taken to avoid ACRP implications in the siting of the road, and that input needed to be taken by the road engineers as soon as possible to avoid the same situation in the valley;
- (h) How the ACRP for the transmission line would be developed was not established, and no one seemed to be taking responsibility for it;
- (i) There was not an adequate monitoring and evaluation institution or program for the ACRP;
- (j) Confusion among landholders over compensation and rehabilitation was rampant, and needed to be sorted out through distribution of a comprehensible “due process” manual;
- (k) Much more extensive community consultation was needed before determining land values.

67. By the time of the joint donors’ mission in May-June 1993, they had in hand a draft ACRP report dated April 1993. It did not yet conform to OD 4.30, and IDA proposed to the borrower that the report would have to be “operationalized ... into an action plan in line with the World Bank operational directive on involuntary resettlement. The deadline for the new action plan was August 1993. The borrower was put on notice that negotiations could not take place in October without “formal adoption of the new land acquisition guidelines and the Action Plan for the ACRP, the latter in line with World Bank policies respecting informal tenure arrangements, informal land holdings, vulnerable communities, public consultation and so forth.”

68. The Bank appears to have sent an ambiguous, two-part message to the borrower at the time of the joint donors' mission in September-October 1993. On the one hand, "full agreement" was reached between NEA and the Donors on substance, implementation arrangements and financing of the ACRP. That suggests that the ACRP was a done deal. At the same time, the donors insisted on certain actions by the NEA by November 1993 for implementation of the ACRP, as shown in an Annex. In fact, in that annex, many more changes were proposed for the draft ACRP. As the winter dragged on, the gap between the ACRP and IDA's policies was not closing. Even as late as February 1994 there remained 22 major areas for changes that were necessary to have an acceptable ACRP. Management was already willing to slip deadlines -- at that point the draft SAR stated that an acceptable plan would be developed during negotiations, but others attempted to stick to the original commitment that receipt of a satisfactory resettlement plan should be a condition of negotiations. Another attempt was made to obtain an acceptable ACRP in May, since the ACRP was not yet in compliance for negotiations.

69. Nevertheless, on May 26, senior management requested agreement of the Chairman of the Loan Committee, to proceed to negotiations leaving pending some key resettlement and ACRP issues to be taken up at the time of negotiations:

- (a) the membership and operational details of the appeals forum, which is part of the grievance redress system;
- (b) the level of compensation payable to tenants (both formal and informal); and
- (c) the criteria for and level of compensation payable to people affected by transmission line right-of-way restrictions.

Negotiations were held in late June in Washington, and a mutually-agreeable ACRP appeared to emerge. Even though negotiations were closed, disagreements over specific provisions continued in subsequent months. The Pre-Board Mission of September found itself renegotiating various ACRP issues, both substantive and procedural.

70. When Management sent its most recent mission to the field in April 1995, they returned with a call for still more work on the ACRP before presentation to the Board: "Because of unforeseen delays in implementation of the project, the ACRP for the valley route is in need of updating, to take into account changes in baseline data, cost and budget. As conceived in the ACRP the above updating would involve clarifications on certain related matters."

## **5. Environmental Assessment in the Arun III Hydroelectric Project**

### Background.

71. In 1987, the initial feasibility study of the Arun Hydroelectric Project funded by the Japanese International Cooperation Agency (JICA) had planned for the access road to follow the river alignment to the power house and dam site. After the procurement failure of Credit 2029 on the hill alignment, HMG/N decided to go back to the original valley alignment. Based on NEA and consultant reports, a 122 kilometer valley route was chosen, and the decision was submitted to the project's Panel of Experts (PoE) for endorsement.

72. The process of environmental assessment in the Arun Hydroelectric Project was affected by the existence of previous work under Credit 2029 as well as the introduction of OD 4.01 in October 1991. Although Credit 2029 had a different Task Manager and Division Chief, and the choice of hill alignment was supposed to be environmentally superior, Management took the position that the hydroelectric project could be "grandfathered" and did not need to comply fully with the new OD 4.01. Management's response cites in Annex A that OD 4.01 was applicable "where appropriate and feasible" to project with IEPS before October 1, 1991. As the Panel stated in its Report to the Board on December 16, 1994, it "saw no merit in the allegations that these policy documents are not fully applicable to Arun III." (see Annex A, page 3)

#### Measuring Compliance.

73. Compliance with OD 4.01 requires that project specific environmental assessments should cover: a) existing environmental baseline conditions: b) potential environmental impacts, direct and indirect, including opportunities for environmental enhancement: c) systematic environmental comparison of alternative investment, sites, technologies and designs: d) preventive mitigative and compensatory measures, in the form of an environmental mitigation or management plan: e) environmental management and training: f) environmental monitoring. The environmental assessment for the Arun III Hydroelectric Project did not follow this comprehensive approach, instead it followed a piece-meal approach that had a recognizable sequence, but did not fully comply with OD 4.01.

#### The Role of Environmental Criteria.

74. The environmental assessment of Arun III Hydroelectric Project started by commissioning a number of descriptive studies by the King Mahendra Trust for Nature Conservation (KMTNC) that identified the main characteristics and risks in the valley, followed by project specific reports investigating probable direct impacts and appropriate mitigation measures and finally, with the analysis of indirect and induced changes and mechanisms for managing those processes. This sequence, however, was affected by considerable changes introduced during appraisal, including the splitting of the project, as well as changes in the alignment of the access road itself. Although the change in strategy and road alignment had been taken in 1992, by the end of 1994, the analysis of indirect and induced impacts was not yet complete, and significant work still needed to be performed to complete an environmental management plan, including training and monitoring requirements.

Panel of Experts.

75. At the time that HMG/N decided to change the road alignment to the valley, it sought the endorsement of the Panel of Experts for the project, which considered the issue at its September 30 - October 2, 1992 meeting. The PoE endorsed the decision in principle, but at the same time it made clear certain reservations about the decision. Two pertinent views are cited below.

2.16 - Regardless of which access route is adopted the recommendations and cost estimates of the King Mahendra Trust report on "Environmental Management and Sustainable Development in the Arun Basin" should be released to the public, reviewed, screened and prioritized to facilitate the development of an action plan for implementation.

2.17 - If the valley route is selected, recommendations and cost estimates of the aforementioned Arun Basin report and environmental information and clauses in the tender documents and Engineer's terms of reference should also be reviewed to determine if they are necessary and sufficient for the valley route, and amended as necessary; and NEA's "Environmental Assessment and Management Executive Summary" should be updated and amended to reflect the selection of the valley route and the amendments to these other documents, and to address the issue of impacts on families within the ROW of the hill route who have already been compensated for their land.

76. The qualified endorsement provided by the PoE pointed out specific disadvantages of the Valley alignment:

- increase in forested land in the ROW and possibly less disturbed and higher quality forest and protected wildlife habitat in the ROW: approximately 209 ha vs. 145 ha.

- close proximity to the Makalu - Barun Conservation Area.

- losses and uncertainties resulting from the circumstance that land compensation for the hill route is 94 percent completed.

- additional impacts associated with future construction of spur roads or other connections to hill villages that would have been connected to the hill route.

77. The PoE provided additional recommendations at its October 2, 1992 meeting:

1. The September 1992 Joint Venture EIA of the valley route needed a more detailed comparison of the impacts of the hill route and the valley route, including implications for associated changes in transmission line impacts, if any, and options and implications for families within the ROW of the hill route who have already received compensation.

2. Without an action plan in place, the PoE believed there would be no mechanism in place for controlling off-site impacts, especially encroachment on forests and wildlife, in the vicinity of access road and power stations, south and east of the Makalu-Barun Conservation area.

For carrying out such reviews, the PoE suggested that it would be desirable to engage individuals who were previously involved in the preparation of the King Mahendra Trust reports, the NEA Executive Summary and/or the Joint Venture environmental reports.

78. The PoE argued that attention should be paid to the specific warning that without such an action plan for implementation, there would be no mechanism for controlling off-site impacts such as those on forests and wildlife. In spite of this warning, the plan was not developed and even at the time of writing of this report (June 1995), the NEA has not produced the operational plans that would generate confidence in the implementation of these controls.

79. The October 1992 meeting of the PoE turned out to be its final meeting. Since it did not meet again, the PoE could not follow up on its specific recommendations. At the time that the Request for Inspection was received, Management supported the concept of a single panel of experts for the project. More recently, there has been a recognition by Management that a separate, specialized panel on social and environmental issues is needed. However, this panel is yet to be appointed.

80. The loss of time since the last meeting of the PoE has had a major impact on the project. Tasks laid out at the 1992 meeting received no follow-up. The original Regional Action Plan received neither adequate attention nor serious technical review. The need for the second panel, devoted to environmental and social impacts, has been particularly clear where the specialized knowledge is needed. The new panel, for instance, has a special need for a person knowledgeable in forestry and biomass issues, in order to deal with the long-term deficit in woody biomass resources. It is only now becoming evident that the original scale of the mitigation measures proposed by the RAP is inadequate to deal with this increasing deficit.

81. In too many instances, progress has been stalled by the need to complete another, prior step. NEA's 1993 "Environmental Assessment and Management Executive Summary" could not be updated to reflect the changes in road alignment, as recommended by the PoE, since the additional KMTNC studies were not available until February 1995. As a result, the project went through appraisal and negotiation without fulfilling this suggestion from the PoE.

82. A specific example of time lost is the detailed comparison of alternative road alignments (Recommendation 1 of PoE #7). A table was included in the "Environmental Assessment and Management Executive Summary" (1993), but the detailed comparison of the alternative alignments was not actually completed until Management sent a mission to the Arun Valley in April, 1995.



### Managing Direct Impacts.

83. The 1993 “Environmental Executive Summary “ identifies the major direct and indirect impacts of the project. The major direct environmental impacts of the project are caused by the access road and they include a variety of direct actions that pose risks to biodiversity, cultural diversity and to the livelihood of some vulnerable groups in the Arun Valley.

84. Direct impacts are best mitigated by refinements to project design, controls and specific responsibilities laid on the contractors. To the extent possible, such impacts are prevented by avoiding specific areas such as towns or valuable forest patches. Experts indicate that they can be mitigated during planning by incorporating adequate specifications (such as spoils disposal conditions), during construction, by placing strict controls on the Contractor, and during operation by adjusting operating conditions through close monitoring. In principle direct impacts can be handled if sufficient preparatory work, adequate supervision and careful monitoring are available.

### Institutional Capacity (Direct Impacts).

85. In this project, a critical role is played by the Arun Project Environmental Monitoring Unit (APEMU), to be established by the NEA and institutionalized to monitor the mitigative measures against direct negative environmental impacts expected to be brought about by project activities in the Arun Valley.

86. According to the NEA, the establishment and functioning of APEMU will begin with the issuance of the Letter of Acceptance (LoA) to the Civil Works Contractor for the combined lot consisting of the access road, headrace tunnel, dam and desanding chamber and camp facilities. The APEMU will be institutionalized to work with the project Engineer with the purpose of promoting effective enforcement of environmental mitigation efforts. The objectives of the APEMU are summarized by HMG/N as follows:

- To monitor the implementation of environmental impact mitigation measures to be undertaken by Contractors during the construction phase, and to ensure compliance with contractual conditions in this regard.
- To monitor environmental conditions in the project area to determine whether further mitigation measures are necessary, and take necessary action.
- To ensure close coordination with agencies responsible for dealing with indirect impacts, and assist them where necessary and possible.

87. The APEMU will initially consist of a core group of eight experts with expertise on different environmentally related fields and would be headed by an expatriate environmental expert. The APEMU coordinator (an expatriate engineer) would coordinate inspectors and other supporting staff to field specialists and enforce

compliance on the part of the Contractor. If disputes on necessary actions should arise, the APEMU coordinator will directly approach the CRE for immediate action. He/she would also handle all external communications to NGO's, the Regional Action Program (RAP) and supervise execution of the ACRP.

88. The rest of the specialist team would include: a Computer Engineer to deal with GIS and MIS systems, documentation, data base management, etc.; a Survey Cadastral Engineer to collect field survey data and convert them to cadastral maps in tasks related mainly to ACRP; a Civil Engineer with broad responsibilities including monitoring of contractor's compliance, vehicle emissions and dust level, spoils disposal practices, waste management in construction areas, etc.; a Sociologist or Socio-Economist. for monitoring activities during implementation of the ACRP and following up economic impacts on affected families; a Bio-engineer, Environmental Expert, and Forester as three specialists to monitor all environmental impacts of the project in particular river water quality vegetation, forest resources and wildlife.

89. The supporting staff consists almost exclusively of field inspectors. Since the road construction strategy envisions eight simultaneous construction work fronts, it is foreseen that at least eight field inspectors should be utilized.

90. The Inspection Panel found that independent experts placed significant emphasis on appropriate training for all APEMU personnel as essential for adequate preventive and mitigation efforts. From that point of view, this training and institutional strengthening should take place well ahead of project implementation and construction schedule. Indeed, for such training to be effective, the NEA is already behind an ideal schedule for upgrading the staff of the APEMU. Since the APEMU will only be established after signing of the Contract, it is questionable whether even the hiring of personnel can take place with sufficient time for necessary preventive measures to be implemented.

91. According to the NEA, APEMU will be set up after the Order to Commence as part of the site supervision team and will stay in force until the end of all civil works 87 months later. Then it will be transformed into part of NEA's Maintenance and Operation Team. During project construction, the APEMU is planned as a unit separate from NEA's Environment Division. Technical assistance for strengthening of the Environment Division of the NEA is provided by the Asian Development Bank (ADB), not by IDA, and therefore the timing of the assistance is an important issue over which IDA has little control. Unless NEA's Environment Division is strengthened immediately, and APEMU is set up well ahead of construction, the adequacy of preventive measures and appropriate monitoring can be seriously questioned.

#### Managing Indirect Impacts.

92. The indirect impacts of the project stem primarily from changes introduced and induced by the access road in the Arun Valley. The 1993 "Environmental Executive Summary" recognizes that these impacts are "more important, more far reaching, and much more difficult to deal with."

93. The major indirect impacts of the project are related to changes in migration, deforestation, and the biomass balance of the Arun Valley, as well as modernization and changes in occupation and economic opportunities that may place specific groups at risk. Although both direct and indirect impacts were identified in general terms, the 1993 "Environmental Executive Summary" fails to identify specific impacts and preventive or corrective measures, since most of the report is based on the 13 volume KMTNC studies, commissioned for the original hill alignment scheduled to be followed under Cr.-2029.

94. The Arun III project developed an innovative approach to coping with impacts: firstly an "Environmental Mitigation Plan" (EMP) with impacts including land acquisition and compensation; and secondly a "Regional Action Program" (RAP) to address indirect impacts and induced effects. Together, according to Management, these plans constitute the "Environmental Management Plan" required by OD 4.01.

Institutional Capacity (Indirect Impacts) -- Regional Action Plan.

95. According to the EES, NEA is fully responsible for implementation of the Environmental Management Plan, but no specific mention is made as to the responsibility for RAP implementation. The EES States that: "Regional Action program will be implemented independently but in coordination with the EMP." (page 56). Thus, direct mitigation measures are to be undertaken by the NEA, while indirect and induced ones are to be undertaken by the National Planning Commission under the RAP. There is no single chain of command to oversee implementation.

96. It is worth noting that this appears to be one of the first times that the concept of a regional action program has been introduced in a World Bank project. It should also be recognized that since indirect impacts of the project are potentially more important, far reaching and difficult to deal with, much of the burden of compliance with OD 4.01 is placed under the RAP, which is yet to be completed in spite of the fact that it is described in the Staff Appraisal Report as being "integral" to the project. The Panel has continuing concerns regarding:

- The capability and institutional strength of NEA and other HMG/N agencies to coordinate and carry out the RAP, including monitoring.
- The scale of intervention and level of funding of the RAP.
- Issues dealing with donor coordination since the RAP is to be funded by other donors.

97. According to the 1993 "Environmental Executive Summary", the specific purposes of the RAP include:

- To strengthen the administration of settlements to assist them to cope with the rapid expansion caused by the project.
- To implement a priority program to strengthen Government institutions.

- To undertake specific women's programs, including education and training, establishment of cooperatives, support of micro-enterprises, health, education, and male sensitization.
- To implement a priority program to assist communities to service road construction in relation to demands for timber and firewood.
- To implement a program for preservation of sacred rites, monuments and folk heritage.
- To undertake conservation programs ranging from environmental education through crop genetic diversity and development of conservation areas.
- To carry out biodiversity and ecological research.
- To monitor nutritional levels and determine whether provision of subsidized rice to northern areas of the basin should be continued.
- To take advantage of new economic opportunities, including ecotourism.
- To support local administrative agencies in forming Community Development Committees.

#### Institutional Aspects

98. All the purposes listed in paragraph 97 above are important, but the Panel found few observers who thought resulting activities could be carried out simultaneously. Indeed, many of these purposes require pre-emptive actions ahead of the construction schedule. These activities have not been placed in clear priority order or translated into an implementable plan, including resource requirements and specific personnel to carry them out.

99. A heavy burden has been placed on the Regional Action Plan to deal with a variety of complex issues such as those outlined above. This is a matter of serious concern due to the lack of experience on the part of IDA to oversee such a plan, as well as the widely recognized lack of institutional experience in the borrowing government. In addition, the RAP relies almost exclusively on resources provided by other donors. In effect, a major burden of compliance with IDA policies falls on project components not financed by IDA; unless closer coordination is achieved quickly, it is quite likely that critical pre-emptive and remedial measures of the RAP will fail to see the light of day. Therefore, questions related to donor coordination and collaboration take on even greater relevance. The Panel believes that these measures have not been given adequate attention on the part of Management and HMG/N.

100. HMG/N has designated the National Planning Commission as the lead agency to implement the RAP, which in its original form contained 21 specific recommendations and programs. These have not yet been re-evaluated on the basis of the KMTNC update studies completed in draft form in February 1995.

#### Jobs for Arun Residents

101. The greatest concern among the RAP issues for inhabitants of the region is availability of jobs. Local residents see two major employment impacts from the project:

the jobs they hope to fill in actual construction during the next seven years, and the jobs likely to be generated indirectly through the existence of the road thereafter.

102. The only group to be offered some assistance in the construction process is the seriously-affected families, and the April 1995 Management team found that little had been done in that regard. In one sense, it is understandable, since major construction has not yet begun; at the same time, the Panel found virtually no understanding of the provision for “jobs and training” in the ACRP, and no planning underway to undertake the training so that SPAFs would be at the head of the queue. Loopholes were provided in contractor language that would easily allow for very little local hiring.

103. The issue has addressed as long ago as the 1991 KMTNC studies of the valley. The issue was raised again in the revised volumes submitted to the HMG/N in January 1995: “The overall situation is that, with an increasing population size, stagnancy in off farm employment generation and reduced portering services, the labor use situation in both [high-impact and low impact] areas continues to deteriorate. In a situation where a large project like Arun does not substantially change labor use situation in the project area, it is easy to imagine what the effects would be if migrant laborers were allowed to work in the construction sites. Besides, migrant laborers would add to food demand in an already food deficit area, which would likely cause other negative impacts. This is not to imply that laborers from adjoining districts should not be allowed to join the labor force. The intention is to demonstrate the labor surplus situation in the district and how employment generation by a large project still does not appreciably improve the labor use situation in the project area. (Volume III, pp. 63-64.)

104. After the April 1995 mission, Management identified “training for construction-related activity” as an element of the Regional Action Plan that needed further elaboration. Earlier in the study process, a much more helpful formulation had been created that would begin to meet local needs. That approach created a system of priorities for employment, apparently already attempted successfully in Kali Ghandaki: unskilled labor would be reserved for (in priority order) SPAFs, PAFs, and other people from the Arun Valley. Only for more skilled jobs for which no Nepalis are available should foreigners be employed. Prior and on-the-job training is essential for all local people. All of these elements are stated or implied in the tender documents; the key will be the manner of implementation. Management appears to plan to give attention to the employment issue in both the ACRP and in the RAP; to be effective, it will need active oversight.

#### Forestry.

105. Sufficient attention has yet to be given to forest conservation and management, as well as efforts to prevent deforestation because the scale of the interventions originally proposed appears to be inadequate. All evidence leads towards a long-term tendency of a growing deficit of woody biomass in the Arun Valley watershed based on the results of the KMTNC update studies. This means that efforts to create and provide adequate legal standing to the community forestry groups becomes an even more critical component of

the RAP. It also requires that preventive and pre-emptive measures in the forestry sector be carefully planned and precisely executed ahead of the road construction schedules.

106. The exact locations of community forestry user groups remain to be identified with respect to the road construction schedule in such a way that they start functioning ahead of project implementation. Since over 500 forestry user groups have been established in the Arun Valley, this task is critical and involves legal transfer of the land by HMG/N, setting up the management structure and technical assistance requirements for each group. These forestry users groups have been established with ODA technical assistance, which is scheduled to terminate in two years. The continuation of ODA technical assistance in the forest sector is an essential element to prevent long-term negative indirect impacts of the project.

#### Glacial Lake Outburst Flood (GLOF).

107. Risks associated with natural catastrophic events such as GLOFs and road wash outs due to monsoon rains were highlighted by the Panel in its earlier report to the Board. Management convened a Seminar of experts in April 1995 to analyze in detail the risks associated with GLOF. The general conclusions are that the risks are real and should be monitored closely and eventually mitigated through lake drainage, if it should become necessary. A team has been dispatched to Nepal in June 1995 to undertake the necessary field work to identify threatening glacial lakes, with a report due in the fall.

#### Road Maintenance

108. High monsoon rains lead to devastating floods which constitute permanent risks and inevitably lead to road washouts of variable severity. This risk has not been analyzed in sufficient detail, perhaps because the precise valley alignment is not yet decided upon. The Panel found that appropriate contingencies had not been budgeted to deal with this persistent problem.

#### Biodiversity -- Cloud Forests.

109. The Panel surveyed samples of the remaining Cloud Forests along the Hill route, and found that even in the most valuable areas along the two road alignments, the biodiversity had been severely damaged by intrusive cultivation. Nevertheless, the Panel was concerned that interest in and measures for protecting the remaining Cloud Forest areas had largely disappeared with the shift of the road route to the valley. This issue raises more generally the problem that a revised RAP, to reflect the shift in road alignment, may choose to ignore the continuing problems along the ridge route. Since the focus of the RAP is meant to be on indirect impacts in the region, not just along the road, the Cloud Forest is an example of an issue that may be unfortunately lost.

## **6. Indigenous People in the Arun Project Area**

110. The most recent reviews of this issue and policy by Management have both clarified and obfuscated aspects of the question originally posed by the Requesters.

Because the ethnic groups of the area being impacted by the Arun III project do not fit the classic expectations associated with OD 4.30, some observers have sought to dismiss the applicability of the OD. We are not dealing, after all, with the kind of isolated tribal group untouched by modernity that some would argue is foreseen in the OD. The position is unsustainable, however, since other observers on the ground and in Bank Management have recognized the larger purposes of the OD -- to ensure that groups in the population chronically vulnerable to damage from the development process, who can be identified by their ethnic affiliation, need special monitoring and programs. The fact that some of any given ethnic group have achieved some degree of integration into mainstream society does not discount the concerns of the majority of a given ethnic group, whether labeled "indigenous people" or not.

111. In this case, the Panel found in conversations among the people in the Arun Valley that some ethnic groups are clearly more prepared to deal with the changes in their lives than others. Concern was expressed particularly about the Rai communities that live north of Tumlingtar as likely to be least able to maintain their current social structures, and also most likely to face daunting pressure from outside the Valley and other Valley residents as economic opportunities explode with the construction process. Nevertheless, it cannot be generalized that all Rai people will need special assistance. Nor can it be ruled out that non-Rai will suffer particular disadvantages in particular villages in the midst of rapid change.

112. As a result, the Panel found that a sensible approach had been discussed: to ensure that adequate anthropological surveys are undertaken well in advance of construction, with clear measures of well-being, and then close monitoring of their condition as the project progresses, and as an integral part of IDA oversight. Contingency plans for remediation in the context of the Regional Action Plan can be established to meet challenges as they emerge.

113. There are particular reasons in the Arun Valley to err on the side of caution with regard to vulnerable ethnic minorities. Virtually the entire population of the three districts touched by this project already live in a highly vulnerable status: for example, it is estimated that only one in ten farming families can support themselves from the land. Casual employment then becomes crucial to ensure people do not starve. Where there is a propensity for any disadvantage among particular groups of people, it will be crucial for a working monitoring system to pick up distress signals quickly, before communities disintegrate and there is additional flow of the homeless and impoverished into the cities. The background work of the King Mahendra Trust, particularly in its volume on "Sustainability and Economic Growth," makes clear that certain parts of the population will suffer declines in income with the opening of the road, through the short- and medium-term. OD 4.30 would require that the Bank ensure that ethnic communities not be generally harmed in this process. Management has indicated in the past that they expect the OD to be addressed directly when the Regional Action Plan is given operational details.

## **7. Findings**

1. The findings below reflect the Panel's analysis of the foregoing Inspectors' report, its field inspection in Nepal (May 27-June 1, 1995), and in view of Management's initiative and pursuant to the terms of the Executive Directors Authorization of the Investigation (IDASecM95-36), these findings also take into account Management's proposed remedial measures in assessing compliance with the three policies. The initiative referred to means that after the investigation was authorized Management made a substantial effort to bring the project into compliance with the three policies. To this end an IDA staff mission visited Nepal in April 1995 ("April mission"). On May 23, Management sent the Panel a memorandum attaching proposed remedial measures based on the findings and recommendations of the April mission.

2. After the April mission Management pointed out in its transmittal memorandum to the Panel, that all the attached proposed remedial measures (Annex 2) would have to be satisfactory to IDA. In addition the memorandum stated that Management would communicate to HMG/N the criteria to be met for the measures to be satisfactory. In terms of timing Management will require all such measures to be either completed or defined and initiated prior to Board presentation of the proposed project.

### ***Findings on Environmental Impact Assessment (OD 4.01)***

3. **Management's Proposals.** The recommended measures relate to the direct impacts of the proposed choice of road alignment. A detailed comparative analysis of the valley and hill access routes, recommended by the Panel of Experts in 1992, was prepared after the April 1995 mission. It confirms the proposal that the access road should be built along the valley alignment provided that the Environmental Impact Assessment takes into account the following:

(a) Spoils disposal;

(b) Impact on wildlife and aquatic Life:

(1) avoidance of Makalu-Barun Conservation Area or mitigatory and compensation measures;

(2) Sal Forest Patches: measures are to be included in the Regional Action Program discussed later in this report; and

(3) aquatic life; and

(c) Impact of increased traffic on the market town of Hile.

4. **Panel of Experts ("PoE").** The establishment of a second separate specialized PoE consisting of social and environmental experts is now proposed but has still to be created and appointed.

- The Panel notes that the original PoE has not been convened since October 1992. Therefore it could not, as required, follow up on its recommendations. Mechanisms to ensure periodic PoE meetings and follow-up are therefore needed.

5. **Glacial Lake Outburst Flooding.** In addition to the measures proposed in Annex 2, Management has also addressed the problem of such flooding risks referred to in the



Panel's preliminary report. In April Management convened a panel of experts which concluded that risks are real and that monitoring should commence immediately. HMG/N has arranged for financial assistance for a team of experts to carry out an investigation of the Barun glacier lakes starting towards the end of June.

**6. Road Maintenance.** During their field inspection, the Inspectors' verified monsoon flooding as a significant natural risk that requires attention. Uninterrupted motorized access is necessary to ensure that equipment can be brought in to the project site during construction. Without this, there is a high risk of considerable project delays and higher costs.

- The Panel finds that the choice of the valley route will require provision for appropriate funding of contingencies to cover maintenance in the event of road wash-outs resulting from river flooding due to monsoon rains.

***Findings on Involuntary Resettlement  
(OD 4.30)***

7. **Credit 2029-NEP** (approved by the Board in 1989). The April mission found there are families seriously affected by the access road project in Tumlingtar who sought rehabilitation but received no assistance. The mission also concluded that there may well be more families in the Basantapur area who have been similarly adversely affected.

8. The mission also noted that HMG/N had paid compensation to most of the 1,635 families whose land was acquired for the hill access road project. However the legal process of transfer of ownership had been completed for only 15-20 percent; of this percentage, the land of only 18 families was in fact physically possessed by HMG/N.

9. With respect to those who were displaced in 1989-90, Management recommends that HMG/N investigate the conditions of the families *whose land was actually physically possessed* and in accordance with provisions of the borrower's guidelines offer rehabilitation assistance.

- The Panel notes that, although necessary both for those displaced and for a large portion of the Arun Valley population, **provision** for access to jobs/training is not adequately addressed.
- The Inspectors found that the land of those who filed the Request for Inspection had been acquired but not physically possessed. They have been adversely affected by uncertainties over the last half decade as the result of the change in access road alignment. Their future is still uncertain. (See paragraph 52 of Annex 1) Approximately 1,400 other families are in a similar situation.

- The Panel finds that IDA failed to observe in substance the policy requirements for supervision of resettlement components and consequently failed to enforce covenants in the Credit Agreement.<sup>1</sup>

10. Management's proposed remedial measures with respect to land acquired but not possessed, as outlined in Annex 2, require that the borrower formulate a *time-bound* plan indicating which land is to be utilized for future road construction and which is to be returned, including measures for protecting the standard of living of those whose lands will be possessed and the procedures to enable original owners to regain their lands.

11. **Valley Route** (Proposed Credit). Management proposes an update of the Acquisition, Compensation and Rehabilitation Plan.

12. **Implementation of Resettlement Plans.** The Panel agrees with the 1991 consultant study of past experience in Nepal which concluded that more follow up and much more emphasis must be placed on monitoring and evaluation of both the land acquisition process and implementation. It is worth noting that both the Operations Evaluation Department and regional reviews of the Bank's experience with resettlement stress the central importance of early attention to strengthening governmental capacity to manage such programs. The studies point out that monitoring by IDA has been chronically inadequate despite consistent findings that oversight must be exercised constantly during implementation and beyond.<sup>2</sup>

#### ***Findings on Indigenous Peoples (OD 4.20)***

13. Management proposes that the three actions required by OD 4.20 with respect to indigenous people should be extended to all residents of the Arun Valley. These actions are (i) informed participation through public consultations, (ii) security over land tenure, and (iii) an action program with socially and culturally appropriate components. The "action program" means the Regional Action Program discussed further below.

14. The Inspectors found that people who qualify as "indigenous" under IDA's policy are scattered throughout the valley and live in conditions similar to those of non-indigenous people. Management's proposal that requirements of the policy be applied to all inhabitants is appropriate and should bring the project into substantial compliance with OD 4.20 if its implementation is subject to continuous monitoring and supervision.

#### ***Findings on the Regional Action Program***

15. A significant number of actions required by OD 4.01 and OD 4.20 are to be included in the Regional Action Program ("RAP"). This is an innovative approach to an environmental action plan which has the potential to become either a model for future work or, if badly implemented, a serious weakness of the entire Arun III project.

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<sup>1</sup> See OD 4.30 paras 22 and 31. See also para 30, which requires that the resettlement plan and the borrower's obligation to carry it out be reflected in the legal documents. Other necessary resettlement-related actions must be covenanted.

<sup>2</sup> See, for example, OED Report No. 12142, "Early Experience with Involuntary Resettlement: Overview," June 30, 1993.

16. Described in the Staff Appraisal Report of August 1994 as being “integral” to the project, the RAP has nevertheless yet to be completed. It would be the main mechanism for dealing with indirect environmental and social impacts — an extremely ambitious undertaking which in its original form contained 21 specific recommendations and programs to deal with a variety of complex issues.

17. **Forestry.** Effective forestry management is expected to mitigate the increasing biomass deficit.

- The Panel notes that preliminary actions to address this problem need to be completed. Measures to grant security of land tenure to forest user groups are now proposed. First, maps showing the boundaries existing forests as well as those planned to be managed by forest user groups have yet to be prepared. Second, as of the date of writing, Management is still waiting for the planned review by the Bank’s Legal Department of Forestry By-Laws. Depending on the outcome, Management intends, if necessary, to propose further remedial measures. The Panel also finds that continued technical assistance to be funded by donors other than IDA is critical to this component.

18. **Protection of the Remaining Cloud Forest.** Only patches of cloud forest remain and are located along the now abandoned hill route.

- The Panel finds that appropriate mechanisms for their protection have not been included under the RAP.

19. **Donor Support and Coordination.** Funding of the RAP is to be provided by major bilateral donors who must be committed to continuing support throughout the life of the project. The RAP involves many different programs in many different areas, implementation by different executing agencies, and funding by a number of different donors.

- The Panel found inadequate capacity for sustained coordination of all these different aspects

20. **Institutional Aspects.** Management requires that the borrower complete a redesigned and expanded RAP<sup>3</sup> prior to Board presentation. (Annex 2 at p. 3). The Panel notes that:

- Since it is the first time such a regional action program has been designed, those involved in designing the original RAP need to continue their work to ensure that an institutional memory is established in order to inter-link in the future, all the different actions.

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<sup>3</sup> The original studies conducted by the King Mahendra Trust (“KMTNC”)—a local NGO—which provide an excellent basis for the RAP, were completed in 1991 based on the hill route alignment. Additional and updated KMTNC studies were completed recently in February 1995. Due to the change in road alignment in 1992 the borrower has to redesign rather than update the RAP.

- To implement *pre-emptive* environmental and social measures institutional capacity needs to be strengthened *now*.
- Responsibility for implementation appears to be fragmented. Direct mitigation measures are to be taken by one executing agency while indirect and induced ones are to be taken by another. The design does not yet provide for a single chain of command or integrated organizational structure in the Arun Valley to oversee implementation.

21. Given the complexity, scale and scope of proposed developmental interventions in relation to the existing institutional capacity in Nepal, the Panel is doubtful that the project’s mitigatory environmental and social measures can be implemented within the time frame proposed by IDA.

- The Panel finds that the lack of institutional experience will necessitate implementation of a massive institutional capacity building plan and identification of further resources to fund it, as well as intensive IDA staff supervision throughout project execution.
- In relation to environmental measures in particular, the Panel notes that OED studies indicate that projects often suffer, or take much more time and funding than anticipated, because of an underestimation of the effort needed for building adequate institutional capacity as well as from a lack of constant supervision.<sup>4</sup>

### Documents

Attached to this Report is a “List of Documents Archived at the Office of the Inspection Panel”. It lists those documents numbered and deposited in the Panel’s archives. These were officially transmitted to the Panel at its request, or offered to it, by Task Managers and other staff.

In addition to complete access to IDA files the Inspectors had access to, or sought out, a wealth of additional published and unpublished material from both within and outside the Bank.

The Panel wishes to thank relevant staff for their untiring cooperation and large amount of time and effort they spent in providing the Panel with documents.

<sup>4</sup> See, for example, OED Report No. 12403, “Annual Review of Evaluation Results 1992,” October 13, 1993.