

Bone Biology

In Barbara J. Culliton's concise and accurate article about the National Institutes of Health Conference on Osteoporosis (News & Comment, 20 Feb., p. 833), the figure caption on page 834 refers to "osteoporotic bone, which has lost calcium." This wording does not identify the fundamental problem in osteoporosis, namely, the loss of whole bone (deossification). The implication is that remineralization may correct the problem. Unfortunately, the mass of a deossified skeleton only can be improved by cellular deposition of an organic matrix and by mineralization in a pattern typical of bone. If one follows this line of reasoning, the terms "demineralization" and "loss of calcium" are not applicable to bone loss in osteoporosis, since osteoclastic resorption appears to remove inorganic and organic fractions of bone nearly simultaneously.

As Culliton points out "There is a lot to learn about basic bone biology before one can hope to develop surefire therapies for preventing or reversing osteoporosis."

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World Bank Projects

It was a pleasure to read John Walsh's article "World Bank pressed on environmental reforms" (News & Comment, 14 Nov., p. 813), which addresses the World Bank's controversial environmental practices in considerable detail. However, certain quotations may leave readers with the erroneous impression that environmentalists are opposed to continued funding for the Bank and that we have impeded performance of the Bank's mission in Africa on account of unfortunate errors made in South America.

To the contrary, we have supported funding for the Bank, despite the fact that Africa has been the scene of several ill-advised World Bank projects. For example, the World Bank-financed \$112-million "Bura" irrigation and resettlement project in Kenya was a disaster, resulting in destruction of tropical forest, pesticide contamination of drinking water, and rampant disease among settlers. After concluding that the project had cost \$40,000 to \$50,000 per family

settled, a Bank evaluation team declared the project a failure and concluded that "[l]arge-scale irrigation schemes as a means to promote settlement are costly and questionable" (1). According to one report, none of the large agricultural projects, such as Bura, "built over the past ten years in black Africa have made a dent in the current famine" (2).

In 1985 the Bank funded the \$18-million cattle development project in Botswana, described in Walsh's article, despite the fact that the Bank's own consultants had concluded that a previous project in that country based on the same assumptions had "no ability to halt or reduce damage to range resources—if anything, the reverse. . . . [W]ithout the benefit of the doubt it seems unlikely that any African livestock development project would ever be funded" (3). These and other misguided investments illustrate that environmentally unsound projects often lead to economic and human welfare losses, and not to sustainable development.

Our organizations have been strong supporters of foreign aid generally and for Africa in particular. We publicly endorsed the Administration's budget request for the multilateral development banks for fiscal year 1987. We support H.R. 1199, introduced by Representatives Howard Wolpe (D-MI), Benjamin Gilman (R-NY), and others, a bill that would substantially increase bilateral assistance to sub-Saharan Africa for ecologically beneficial projects. We do, however, believe that improvements in the quality of World Bank lending should not be left to chance. U.S. contributions to the World Bank should be accompanied by explicit expectations that the Bank will make rapid, measurable progress toward the goal of environmentally sound, sustainable development.

Despite 4 years of heightened scrutiny by Congress, the Reagan Administration, and the public, the World Bank has yet to make the needed reforms. For example, last summer the Bank approved an electric power sector loan—opposed by the U.S. government on environmental grounds—that will finance the completion of several uneconomic and environmentally harmful dams in Brazil.

A 3-year commitment of nearly \$2.9 billion has been requested from Congress to fund the International Development Association (IDA), the "soft" loan window of the Bank. Unless the Bank can demonstrate that it has taken major steps to improve the environmental soundness of its lending, there will very likely be difficulties similar to those of past years in obtaining appropriations that total almost \$1 billion per year. We are not necessarily opposed to the IDA replenishment. However, rather than simply

accepting this quantity of aid to Africa, we are concerned that the quality of such assistance improve. The World Bank has now undertaken a substantial reorganization, the outcome of which will be a test of the Bank's good faith in improving environmental practices. By rapidly implementing reforms, World Bank President Conable can ensure that environmental concerns no longer cast doubt on the quality of the Bank's performance.

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1. Bura Irrigation Settlement Project, Mid-Term Evaluation Report (World Bank, Washington, DC, 1985), p. 47.
2. Eng. News Rec., 17 January 1985, pp. 10–11.
3. S. Bekure and N. Dyson-Hudson, International Livestock Centre for Africa, *The Operation and Viability of the Second Livestock Development Project* (Botswana Ministry of Agriculture, Gaborone, Botswana, 1982), p. 2.

Malaria Diagnosis

In their report "Specific DNA probe for the diagnosis of *Plasmodium falciparum* malaria," Barker *et al.* (21 Mar. 1986, p. 1434) imply that they have invented a new tool for malaria diagnosis. In 1984, we reported the "Analysis of clinical specimens by hybridisation with probe containing repetitive DNA from *Plasmodium falciparum*" (1). In this article we clearly brought up the idea of using cloned repetitive *P. falciparum* DNA for sensitive and rapid screening of blood