Session 3: Challenge Facing Resource Development: Questions and Answers
Moderated by Emilio J. Cárdenas

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SESSION 3: QUESTIONS & ANSWERS

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QUESTION: I wonder whether local items can really throw some light on what the focus of legislation ought to be, especially for countries that are just developing environmental legislation. I am speaking of the distinction between process and result. By result I mean legislation, and by process, I mean regulation of industrial activity generally. What kind of emphasis do you think a country that is just developing its own regulations now should look out for especially in the comparative experience of developed jurisdictions? I just want a common sense of where we should be looking, is it process or result?

MR ADAMS: I first want to make a distinction between mining and processing. The reason I want to make that distinction is that every mine site is different in a way that every oil refinery or aluminum smelter or copper smelter or steel rolling mill is not.

If you go to a steel mill, it looks pretty much like any other steel mill around the world. If you go to a mine, it differs from other mines. A mine in a desert in Arizona has a completely different environmental service as compared to a mine in a tropical country or a mine in the arctic, and so on.

So I do think in mining there is no choice. The regulation has to be about outcomes and not about methods. I think it is reasonable for a developing country to seek outcomes that as a starting point are the outcomes that we seek in the advanced industrial countries, but with the proviso that I think there should be an intelligent test of cost efficiency. It may be possible to have a somewhat lesser desirable outcome if the thing is subtly prohibitive. If getting from 90% to 99% is prohibitive, 90% is preferable.

When we are talking about process industries and manufacturing industries and so on, I think then that the argument is much better couched in terms of methods because capital is a fungible international resource. If we know how to make copper, for example, and capture 90% of it in the United States, we know how to capture 99% in sovereign Russia, and 99% in sover-

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eign China, and it really is a capital issue. The environmental compliance at the mining level can be radically different.

If you try to impose a particular Arizona environmental regulation in Nigeria, you might find a very bizarre result in terms of a factor of ten or fifteen times more expensive. That would not be the case with capital.

So I think the real difficulty is the nature of mining. I don’t know whether that is the same in oil. It may very well be, offshore may be quite different from onshore, and so on. But the North Sea may be very different from the Gulf of Mexico.

MS. KING: From a financial viewpoint, environmental regulation is not bad and I don’t think the developing countries should be afraid in imposing them. They will not turn away investors or companies from their country.

What is bad, and the industrial countries excel in that too, is the unpredictability and the inconsistency of deregulation. As a result, midway through a project the regulation is eliminated for the project next door or it is altered somewhere else, which kills not only the project but the name of the country as well.

As I said, what really kills the project or the name of the country is when you go in and you hear this and then midway through the investment process, the rules are completely changed and that is it.

MR. ADAMS: I want to clear up one point about elephant projects. I didn’t use that project in an environmental context, I used in an economics context; the elephant project burying the one that has an intramarginal rate of return. Elephant projects may not be environmentally huge. I mean, the mineral deposit, if it is very, very rich may have a lesser environmental impact to actually extract it because the grade of the deposit is so much higher. Thus, it should not be an environmental issue, the affordability of the elephant project is very great, and it can afford probably to comply with the very best international standards the technology provides. In my view it should in that case and I suspect that that is also the view of all the mining companies anyway. No one wants these problems.

The issues of affordability, I think, more applies to more marginal projects and it also applies to the question of cleaning up facilities that have already been constructed. For example, in central Africa, virtually none of the copper smelters have envi-
ronmental controls. They should, but whether they need the billion dollar solution that we have in Utah or whether they could get by on perhaps capturing 80% or 90% of the sulphur for a hundred million is very, I think and intelligent question to answer and probably a more reasonable one.