The field of decision analysis is a systematic parsing and summing of the odds of all the contingencies according to the best available knowledge. The decision analysts of the advantages of seeding, with the present information, indicates an expected reduction of damages of about 20 per cent. This is to say, in average, an average of $100 million in preventable storm damage every year that we neglect these opportunities. How precious is that greater concern, which might be gained from further trials?

Dr. North and his colleagues suggest serious consideration of operational trials, in spite of problems, and issues. Those who doubt that seeding influences the storm at all might judge there was little to lose except for the political risks.

Political Decisions

This political risks are, however, very great—and they may require more sophistication in achieving honest understanding and commitment by the public than we know how to arrange. And the greater the scope of the human tragedy at stake, the worse the risks in this, as in other reaches, of politics.

Suppose, for example, that the catastrophic cyclone that struck East Pakistan last November had been successfully tempered, to the extent of saving 100,000 lives, an incredible humanitarian triumph. Still, would technocracy, having once intervened, been spared an indictment for genocide of the remaining 500,000 victims? And if the storm had swerved to the west, would the blame not have been perverted to a malicious act of meteorological warfare?

In a context of profound social disorder abroad any intervention is perilous; but we should not allow the technocrats the luxury of perfect knowledge before action! Some form of plebiscite might be thought justifiable for the increasingly threatened populations of the eastern seaboard. However, traditional styles of politics have never provided an atmosphere for facing the challenge of making responsible commitments for or against the gamble.

The public certainly deserves the benefit of better knowledge that can be gotten by further research; it also deserves to know what odds of benefit or harm are on the table today.

Unfortunately, this is not a private investment that each citizen can make for himself, any more than we can bargain with each other about how much he personally wants to shell out for national defense or social welfare, and what benefit will come from it.

The problem of reaching competent political decisions on weather control is bound to enlarge in the next few decades. The national seeding of hurricanes today may be yes, may be no. In either case, we need to develop and exercise the requisite machinery for responsible consent—without much more delay.

We see that standing by in the face of ignorance yields no assurance of wisdom. We are too often confronted with the thought that a seed would be objectively worsened. Perhaps worst of all, the natural variation in storms might result in worse hurricanes that expected before seeding—which could sometimes happen even if the seeding were beneficial. Such a mishap would blacken the reputation of all meteorologists, generate endless recriminations against the government, and perhaps paralyze all future storm-modification research.

The eye of a hurricane, from space.