



PERSPECTIVE...

The Pesticides Industry and Government Regulation

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I HAVE HEARD IT said that those who are engaged in "pure" research cannot be concerned with costs; and scientists so engaged should not, I believe, have their scopes of action limited by cost inhibitions. But agricultural scientists in federal and state agencies who are engaged in applied research should have ultimate cost factors in mind; and scientists engaged in research for pesticides manufacturers must always be cognizant of the costs of development and production. . . .

The production of pesticidal compounds today, like some pharmaceuticals and the antibiotics, has reached the category of big-time capital investment. No longer can it be done with a few old barrels, some bottles of "dope," and a paddle operated by poor-white help. The costs of discovery, synthesization, pilot-plant production, exploratory testing, compilation of toxicological and pharmacological data, registration, and commercial production plant facilities have, for a single pesticide, totaled probably \$2.5 million before even being offered for sale. So volume sales must be almost a certainty—not a hope. . . .

Having such costs to contend with, the industry can continue to function and prosper only if it can produce new basic compounds at costs which will permit profitable sales in a competitive market, because profits from sales must return to working capital, within a couple of years, those very considerable development costs.

Such rapid return of capital investment, plus working profits, are essential requirements. Why? Because possible quick obsolescence of a new pesticide is an ever-present unknown factor. . . .

Here is a fork in the road—a division of values and benefits. A manufacturer's vested interest disqualifies him from deciding whether his new and wonderful product would, if marketed and used, be in the public interest. That decision now rests with the Pesticides Regulation Section of the Agricultural Research Service, United States Department of Agriculture, which must certify usefulness to the Food and Drug Administration for the establishment of tolerance regulation. USDA's decisions must in each case be based upon extensive factual data, much of which does not, and cannot, originate with the would-be producer of the new compound, but from USDA field researchers and researchers in experiment stations operated by the land grant colleges. The whole task cannot be done by scientists and the chemical industry. Adequate protection of the public and of the agricultural industry itself requires regulation by governmental agencies. . . .

Such controls are vital links in the protective chain that reaches from, and back, to the "pure" researcher and all other consumers of agricultural crops. (*Excerpts from an address in Portland, Ore., Jan. 20, 1956.*)