Dr. Clarkson believes that there would be a conflict of interest if the USDA initiated a fee charging practice. One of the objectives of the ARS is to promote the use of effective pesticides. There might be a danger of loss of objectivity or prestige if the farmers thought that the USDA was working with money obtained as fees from industry.

Another alternative to meeting the problem of pesticide regulation which seems more attractive to Dr. Clarkson is more effective liaison between state and federal control officials. He said that the AOAC has done a commendable job in working for uniformity of pesticide regulation, and educational programs to impress the value of properly used pesticides on the public.

The AEPCO has had an active program for adequate precautionary labeling which Dr. Clarkson said is taking the lead in educating the public on the need to study directions and follow them. He said that, through the efforts of the association, users are becoming aware of the importance of labels in reducing the chance of injury to people, livestock, and crops.

These educational jobs which can be handled by organizations such as that of the state control officials are good examples of effective cooperation between state and local agencies. It is cooperation in areas such as this that Dr. Clarkson believes will greatly help the ARS to accomplish its increasing job on a decreased budget.

FDA Commissioner Larrick talks it over with his former boss and former FDA Commissioner, Paul Dunbar

Foreign

Ag Chemicals Play Small Role in Latin American Plans

Foreign exchange squeeze means food production goals must be met with limited technology . . . Markets do exist in export regions

No more than 5% of the total area of South and Central America is arable land and only about 3% of the total land area is cultivated annually. The vision of subtropical plantations to feed the world may, in fact, be an illusion. Cropland potential in Latin America is vastly below that of Europe, where 30% of the total land area is under annual cultivation; 10% of the world land area is cropland. The concept of a vastly promising Latin American agricultural frontier may be proved specious as a result of land surveys now in progress.

The perennial problem of increasing population on a limited land base is heightened in the South American republics by the fact that the population of the region is increasing at such a rate that it will rise by about 25% in the next 10 years, the most rapidly expanding population of any major world land mass. Even to maintain present standards, the population increase curve indicates that agricultural production standards will have to increase at a rapid rate. Demand for food promises to increase even more rapidly than population.

A situation such as that presented by Latin America in which demand for agricultural products is increasing at a rate even greater than that in the U. S. should present ideal opportunities for applications of agricultural technology. The question is—opportunity for whom?

The Food and Agriculture Organization of the UN recently published a comprehensive study of agriculture in South America with a discussion of future production trends. The year 1956–57 has been established as a target period for improvement programs of the region. At recent regional meetings of UN representatives various programs for increasing production on the regional and national levels have been discussed and the year 1956–57 could be a period of decision not only for the people of Latin America but also for North Americans interested in future trade possibilities of the region.

Achievement of the targets for the 1956–57 period will require a substantial increase in the per acre yields of crops and livestock. These production targets have been established as possible achievements, using the natural and financial resources of the various South American nations. The potential for participation of American industry in these programs on a free enterprise basis appears to be somewhat limited.

Fertilizers

Consumption of fertilizers in South America is extremely low, in most cases per acre application is almost negligible. Nearly all the fertilizer used is applied to the principal export crops, cotton, sugar, and coffee. The fertility of the cultivated area of the region is generally agreed to be deteriorating. In many areas land which was originally deficient in plant nutrients has never been brought up to a level of fertility to produce even moderate yields. In some districts of Brazil, about 95% of the organic matter of the tropical soils has been lost after only two years of cultivation.

The over-all situation has been one of intensive though primitive agriculture depleting the soil resources of a continent which has almost reached the limit of its agricultural area exploitable by current techniques.

There has been no appreciable increase in fertilizer consumption for the Latin American region in the last four years. However, a few countries have shown substantial increases in consumption—Brazil, Cuba, and Mexico. These increases in fertilizer consumption have probably been due to increases in export prices for agricultural products rather than a change in the farming practices.

As a regional market South America does not loom on the horizon of opportunity for U. S. manufacturers. General opinion of the FAO report is that any increase in fertilizer consumption to be attained in South America will only come as a result of production of fertilizers in that region. World trade conditions might have some influence on possible fertilizer markets in areas where such exportable agricultural products are produced as cotton, coffee, and sugar.

The report sees no evidence of an appreciable increase in fertilizer consumption to contribute to the over-all problem of increasing food production for the people of the area by 1956–57.

Pesticides

Use of pesticides in South America is also extremely limited. One of the major reasons for this seems to be that there is very little pest control practice by the individual farmer or land owner. Pest control programs are usually conducted by the national government to combat crises presented by major pests. Locust and grasshopper control and control

Western Ag Chemicals Group Meets

Paul Mayfield, general manager, Hercules naval stores division, and former president of the National Agricultural Chemicals Association, was the featured speaker at the recent 25th annual convention of the Western Agricultural Chemicals Association. From the left are: Stanley Strew of Chipman, re-elected WACA president; Charles E. Cody of Calspray, WACA program chairman; and Charles Barnard, WACA secretary

programs on cotton pests probably account for the vast majority of the pesticide consumption of South America.

Agricultural production in South America, however, suffers extremely heavy losses due to crop pests. In Peru about 20% of the cotton, 5 to 15% of the corn, and 20 to 30% of the potatoes are lost to pests each year. In Brazil pests have been reported to rob the cotton grower of about 50% of his potential production.

An efficient crop protection program could make a great contribution to increased production of agricultural commodities in Latin America. The UN report says that a moderately efficient pesticide program could make a greater contribution to increased production than all the irrigation programs planned for the next few years. A pesticide program would also contribute more to increasing production than several other forms of agricultural development which at present have high priority in the region.

Under present cultural and economic conditions it is not likely that scientific pest control will make a major contribution to the 1956–57 production targets for Latin America. This forecast could change if more countries would undertake more active pest control programs, for pest control is one activity which would allow the achievement of more or less immediate results.

The production targets set for 1956–57, if they can be realized, would constitute a major step forward for the people of Latin America both from a nutritional and economic standpoint. If the region could become less dependent upon food imports, then foreign exchange resources could be diverted to purchasing technological aid, from fertilizers to tractors, which would result in a more productive agricultural economy. The widespread use of fertilizer and pesticides in increasing the productivity of Latin American farmland will probably have to wait until the people there somehow become efficient enough to buy these aids.

Atlas Completes Canadian Emulsifier Plant

Atlas Powder's new esterification plant in Brantford, Ont., began production on Oct. 7, according to F. E. Sterne, managing director of Atlas Powder Co., Canada, Ltd. The new plant is now producing Atmul 82, a mono and diglyceride food emulsifier, and has facilities to produce the ester-type emulsifiers used by the insecticide and other industries.

Plans are being made for the possible addition of a second unit on the same site, to produce ethylene oxide type derivatives. With the completion of the Canadian plant and a second major unit now under construction in Memphis, Tenn., Atlas will produce emulsifiers for food and industrial use from agricultural sources at Brantford, Memphis, and Wilmington.

The capacity of the new Canadian plant, according to Mr. Sterne, is large enough to supply the emulsifier needs of the entire Canadian baking industry. The new plant will also undertake production of custom-made emulsifiers for specific uses and for sale under the private label of industrial distributors.

R. T. Vanderbilt Co., Inc., will distribute the Atmul products to the baking industry. Sale of the other materials will be handled by the sales representatives of the Canadian company from offices in Brantford, Montreal, Toronto, and Vancouver.

Industry

Fluor to Build NH_3 Plant for Hercules-Alabama By-Products

Fluor Corp. has been awarded the contract to engineer and build the projected anhydrous ammonia plant for Hercules Power and Alabama By-Products at Ketona, Ala. The two companies have organized a jointly owned firm, Ketona Chemical Corp., to build and operate the plant.

The plant is to utilize hydrogen from coke oven gas produced at Alabama By-Products' coke plant at Tarrant, Ala.

Auxiliary facilities required for the plant are to be provided by Ketona under separately negotiated contracts, engineering for which will be supplied by Hercules.

The capacity of the plant, which is expected to be finished late next year, is 45,000 tons of anhydrous ammonia a year. The tract to be occupied by the plant is near two large lakes and the I&N Railroad and is close to the coke plant of Alabama By-Products.

IM&C Opens Quality Control Lab in Georgia

A new analytical control laboratory has been opened at East Point, Ga., by International Minerals & Chemical according to Maurice H. Lockwood, vice president in charge of the company's plant food division.

The laboratory runs analyses for nitrogen, phosphoric acid, and potash in various grades manufactured by each of International's 26 fertilizer plants located in as many states across the country. Its principal function is quality control. Its capacity is approximately 100,000 determinations a year.

East Point, near Atlanta, was selected as the site of the laboratory after a study of eight other cities established it convenient as a mailing center.

Designed by Heery and Heery, Atlanta and Athens architectural firm, the building has modern lines in red brick. A patio at the entrance is planted with leriope grass 12″ high, azaleas and burfodi holly.

All laboratory rooms lead from the balance room which is the central point. Its central feature is a custom-built