## Post High School

# Technician Opportunities

### in Agriculture

Professor Norman H. Foote
State University Agricultural and Technical College
Farmingdale, New York

#### Introduction

Post high school technician opportunities for persons in agriculture are exceedingly abundant. The demand is not presently being satisfied and there is no immediate prospect for our doing so in the near future.

Various persons have been trying to define "technician" for many years with varying degrees of success. It is not my intention to attempt it now for I know that we all have at least a satisfactory working definition. Defining "agriculture" is our problem here. Many have come to think that agriculture is synonymous with farming. Perhaps it was in the past, but it is not so today. For purposes of discussion of technician opportunities, agriculture today includes farming as well as areas related thereto and involves both before and after production processes for food and fiber.

Let us now look at technician opportunities in two ways — (1) opportunities for agricultural technician education and (2) opportunities for agricultural technician employment.

#### Opportunities for Training

States like New York and California have had 13th and 14th year agricultural technician education for many years. So far as I can observe most states now see the need for this education and are doing something about it, some faster than others. This kind of education is so new in most states that a big bottleneck exists due to the scarcity of competent faculty. Excellent opportunities exist for capable young men with two years of technical agricultural education who. having a good concept of what technical education really is, will go beyond and prepare themselves to teach in these colleges, schools, and institutes. (The satisfactions that come from working with 13th and 14th year young people are great. This is a critical time in their lives and technical agricultural education works wonders. It is a real thrill to see these young people mature and develop, prepare for a job and then succeed in it.)

Young people cannot handle good technician jobs in agriculture unless they prepare themselves. This often means two years of preparation that are very rigorous years. Such a technician education, if well done, requires nearly 75 hours per week during training. College is actually strenuous, much more so then many people realize. Most agricultural technical colleges have about 30 hours of class meetings per week, so

this, with library assignments, reports and proper pre-class preparation, adds up to nearly 75 hours per week total — no 40-hour week here. New York has six 50-year-old two-year agricultural and technical colleges; and, with new funds available, many other states are establishing similar institutions.

Young people are discovering that only menial jobs are available without some education. Last year one of our freshmen thought he was fed up with college so left to get a job. After driving nearly 1,000 miles in ten days searching for a job, he came back to college. He was refused employment constantly because he had nothing to offer an employer, absolutely nothing to sell.

#### Opportunities for Employment

Agricultural technicians are in demand for many reasons. Furthermore, they are in short supply. Our farms no longer furnish a pool of young people with agricultural know-how. Besides knowledges and competencies, these technicians have already learned how to work and therefore start being worth their wages almost at once. These wages vary according to ability and initiative of the individual and with the opportunities that present themselves. Our New York college is 35 miles out of New York City on Long Island and employers in this metropolitan area are anxious to hire agricultural technicians because they themselves do not possess agricultural knowledge and have acute needs for these skills in their businesses. Our enrollment in agriculture keeps increasing but so do the transfers after graduation to four-year colleges: thus we continue to lag behind the demand for trained technicians

Most employers pay a living wage as a starting salary, with good opportunities for advancement, depending upon the graduate's ability to produce. Lately this has varied from \$70 a week and up in our area, admittedly one of high living costs. I hesitate to mention this lest it create a wrong impression but every request that came to our Ornamental Horticulture Department in writing this past spring paid at least \$100 per week starting salary. The great increase in horticultural work of all kinds has aggravated an otherwise tight situation and enough people with knowhow just do not exist to fill the void.

The following typical employment opportunities for agricultural technician graduates were listed in unpublished doctoral study by Paul De-Cora, Columbia, 1962:

Farm Owner Farm Renter Farm Manager Fruit & Vegetable Inspector Broiler Grower Farm Equipment Sales Farm Equipment Service Chemicals Salesman Technical Assistant Dairy Herd Improvement Junior Biologist Supervisor Artificial Inseminator Herdsman Livestock Buyer Meat Inspector Research Assistant Food Processing Food Inspection Quality Control Food Equipment Sales Food Research & Development Frozen Food Sales Frozen Food Distribution Merchandising Pre-cooked Frozen Foods Garden Centers Landscape Design Landscape Construction Superintendent of Grounds Golf Course Superintendent

Poultry Breeder Manager of Crop Hatchery Operator Turkey Grower Processing Plant Manager Farm Supply Store Mgr. Research Technician Feed, Seed, Fertilizer & Retail Poultry Store Owner Poultry Feed Specialist Laboratory Technician **Custom Spray Operator** Exterminator Pest Control Supervisor Pesticide Salesman State Horticultural Inspec-Food Brokerage Food Purchasing Food Sales Ice Cream Manufacturing Dairy Products Manufactur-Food Plant Management Floral Design Flower Shop Management Flower Grower Nursery Grower Nursery Manager Plant Propagator Turf Grower Park Management

#### New Opportunities

New areas of employment for agricultural technicians keep opening up. Not long ago the field of herbicides created many new technician positions. This continues to grow.

Horticulturist

More and more companies are conducting research and development. This calls for many technicians with agricultural competencies. Wellknown companies like American Cyanamid, Pfizer, DuPont, American Metal Climax, Inc., National Can. Beech-Nut, etc. are looking for laboratory technicians to assist their PhD's. with research; to serve as analysts, handle animals, run field trials, test pesticides, aid in product development and supervise quality control. Avon Products hired two of our young ladies from Animal Science; Revlon hired a young man from Food Technology. Revlon uses many dairy products in their manufacturing processes.

The development of convenience foods has created many technician positions. While this business now is big, it is bound to become much larger with a corresponding increased need for technicians from agriculture.

The farms of America used to supply an agricultural heritage to many who found employment in the city. Now city-bred young people are getting an agricultural technician education to fill the many agriculturally oriented city jobs. Our college at Farmingdale has been doing this for the last 30 years. If a young person comes from a farm, he automatically has something to sell his agricultural background; and some people are surprised at how valuable this is, but judging by the willingness of big business to pay, it is a badly needed commodity.

A new field not yet fully opened up, will, I think, demand many technicians from agriculture. I refer to the use of growth regulator chemicals. As our knowledge increases in the area of plant growth stimulation and retardation, I believe many agricultural technician jobs will be created. The young men and women from our two-year agricultural schools, colleges and institutes will be the right ones to handle much of this work.

The use of computors in agriculture is just starting and is certain to grow. What a wide open area for technicians in agriculture! Programming is the big problem. Perhaps this will require technicians with more than two years of agricultural education, but the two-year technician will also have a place.

My conclusions are brief. Facilities for agricultural technician education are increasing. Agricultural technician jobs cannot be had without preparation. Wages are good. Personal satisfactions for work in this field are great. The technician is now a respected worker. There are more technician employment opportunities for people in agriculture than there are people to fill them and in my opinion this will continue for some time.

## The Changing Curriculum

Keith Justice Abilene Christian College

In discussing the employment and Retired Executive opportunities for agriculture stu-

Vicepresident of Ralston Purina Comdents. Eldred A. Cayce, Director pay, stated that businesses want

Dr. Keith Justice is head of the Agriculture Department, Abilene Christian College. He received the B.S. degree from Stephen F. Austin State College, B.S. and M.S. from Texas A &.M. and Ph.D. from Utah State University. He is a member of the Scholarship Honor Society of Texas A&M, Sigma Xi, and American Society of Agronomy. He received the A.C.C. Board of Trustees Teacher Award, 1961 and was named a "Piper Professor," 1963 by the Minnie Stevens Piper Foundation. (The award carries an honorarium of \$1,000 and was one of ten in the state.)

**Fifteen** March 1966