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ABSTRACT

To assist in a national recruitment effort, this seventh annual report contains information secured from questionnaires completed by head state supervisors and teacher educators in all institutions preparing teachers of vocational agriculture. Data contained in the report pertain to: (1) number of vocational agriculture positions in the U.S. in 1971, (2) the percentage of graduates entering various occupations, (3) enrollment in colleges of agriculture, (4) types of teaching positions, (5) placement of graduates, (6) employment by states and regions, and (7) a 7-year comparison of selected information on supply and demand of vocational agriculture teachers. Major findings revealed that the number of qualified teachers increased to 1,743, the largest number qualified in any of the past 7 years, but the number of persons entering teaching decreased. Over the past 7 years, the number of teaching positions has stabilized at 10,500, although supervisors predict 11,977 positions by 1975. In terms of teaching positions, 92 percent of all positions were in general or comprehensive high schools and only 3.2 percent were employed in area vocational schools. Nearly two-thirds of the positions involved teaching adults and young farmers as well as high school students. Also available are reports for 1969 (ED 037 563) and 1970 (VT 012 386 in this issue). (SB)

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SUPPLY AND DEMAND FOR TEACHERS OF VOCATIONAL AGRICULTURE IN 1971

A STAFF STUDY BY RALPH J. WOODIN

Issued by
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SUPPLY AND DEMAND FOR TEACHERS OF VOCATIONAL AGRICULTURE IN THE UNITED STATES 1970-71

This is the seventh annual report on Supply and Demand of Teachers of Vocational Agriculture in the United States. This series of studies was planned to assist in a national recruitment effort. During the seven years in which these studies have been made there has been a shortage of teachers each year, and the shortage was still apparent in 1971.

Procedures Used in the Study

Information for the study was provided by head state supervisors and teacher educators in all institutions preparing teachers of vocational agriculture. A questionnaire was mailed to each of these persons about July 20, 1971 in which they were asked to provide information regarding number of graduates qualified and the number of teaching positions available.

Responses were received from every state and every institution. A copy of the questionnaire is included in the Appendix.

Summary and Recommendations

For the convenience of the reader a summary and overview of the major findings, as well as certain recommendations, are included at this point.

A record breaking 1,743 were qualified for teaching vocational agriculture in 1971, the largest number qualified in any of the past seven years. At the same time that the number of persons qualified increased, the number entering teaching decreased. This decrease ranged from 64% entering the profession in 1965 to only 49.6% in 1971. A turn-



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over of 9.7% also contributed to the teacher shortage. This percent of teacher turnover is similar to that of other groups of teachers and has ranged from nine to twelve percent for each of the past seven years.

A comparison of the number of teachers of vocational agriculture in the nation over the past seven years shows that the number has stabilized just short of 10,500 positions, although supervisors predict 11,977 positions by 1975. Since 1965 the number of positions has ranged from a low of 10,221 in 1967 to a high of 10,560 in 1969. These figures do not include 897 positions in technical institutes and community colleges.

Type of Teaching Positions

Several trends appear in types of teaching positions in vocational agriculture. Ninety-two percent of all positions were in general or comprehensive high schools and only 3.2% were employed in area vocational schools. Nearly two-thirds of the positions involved teaching adults and young farmers as well as high school students. The number of teachers in multiple departments represented 38% of the total, a figure which has increased each year. More teachers were offering specialized programs in agricultural education. Nearly half of all teachers were offering specialized programs in such areas as Agricultural Business and Supply, Ornamental Horticulture, and Agricultural Mechanics in 1971. Most of these programs, however, were offered on a part-time basis rather than by full time teachers.

only 747 teachers were employed full time in teaching in specialized programs. This, however, represented an increase of nearly 200 over the previous year. Most teaching positions were filled by fully qualified persons holding a Bachelor's degree. In spite of a seven year shortage of teachers only about 350 teachers held emergency or temporary certificates.



Recommendations

Three years ago the Professional Personnel Recruitment Committee recommended that approximately 1800 persons per year be qualified for teaching vocational agriculture in the nation. This goal has been nearly reached. Assuming that economic and social conditions remain normal it would appear that this goal is a realistic one for the next few years. In view of this goal the following recommendations are suggested:

- 1. The major thrust of recruitment efforts should be toward encouraging vocational agriculture teachers to recruit some of their best students each year for teaching vocational agriculture.
- 2. State supervisors and teacher educators should place more emphasis on the placement of qualified teachers. In some cases this may include encouraging teachers to cross state lines to other states where shortages may exist. Efforts must also be made to make salaries of teachers competitive with other fields which they might enter.
- 3. Teacher turnover should be reduced from it's present level of about 10% to about 7%. Such a reduction in turnover would tend to hold more of the better teachers who leave for other positions.
- 4. The goal of qualifying 1800 persons each year for teaching vocational agriculture should continue to guide national recruitment efforts. However, each state should generally try to prepare enough teachers to meet it's own needs.



MAJOR FINDINGS

The demand for teachers of vocational agriculture in the nation is shown in Table 1. Last year a turnover of 9.4% required 984 teachers for replacements and for new teaching positions. This table indicates the seriousness of the teacher shortage in that 120 teachers were needed but not available August 1, 1971, and that 47 departments could not operate during the 71-72 school year. The fact that 350 teachers had temporary or emergency teaching certificates is probably another indication of the shortage of teachers.

TABLE 1 NUMBER OF TEACHING POSITIONS IN VOCATIONAL AGRICULTURE IN THE UNITED STATES IN 1971

| Item | Number | Percent |
|--|---------|---------|
| Total positions as of 6/30/71 | 10,438* | |
| New and replacement positions filled during 1970-71 school year | 984 | 9.4 |
| New positions added during 1970-71 school year | 136 | 1.3 |
| Teachers needed but unavailable 8/1/71 | 120 | 1.1 |
| Number of newly qualified teachers available 8/1/71 | 82 | .8 |
| Teachers with temporary or emergency certificates | 350 | 3.4 |
| Departments which will not operate in 1971-72 because of the teacher shortage | 47 | .5 |
| Estimated number of teaching positions by 1975 * Does not include 897 positions in technical institutes and community | 11,977 | 114.7 |

colleges.

There was a slight decrease in the number of positions during the past year with a total of 10,438 compared to a total of 10,520 in the previous year. When supervisors were asked to project the number of teaching positions in their states by 1975 they indicated an increase of 1,539 positions, or an annual increase of 513 positions for the next three years.

Supply of Agricultural. Education Graduates

A total of 1,743 teachers were qualified by 80 institutions last year and of these 864 assumed teaching positions in vocational agriculture representing 49.6% of the total. Twelve percent entered the Armed Forces last year, leaving a balance of 36.4% of those qualified who entered other occupations such as teaching other subjects, farm sales and service, farming and graduate work. Table 2 shows a comparison of the number of qualified graduates entering various occupations over a seven-year period.

TABLE 2

PERCENTAGES OF AGRICULTURAL EDUCATION GRADUATES
ENTERING VARIOUS OCCUPATIONS

| | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 |
|---------------------------------|------|------|------|------|------|------|------------|
| Occupation | | 61.4 | 60.2 | 61.6 | 56.9 | 51.0 | 49.6 |
| Teaching Vocational Agriculture | Q410 | 0 | | | | | ~ 1 |
| Graduate Work | 9.2 | 10.0 | 12.4 | 7.8 | 9.3 | 9.0 | 9.1 |
| Other Work | 4.7 | 8.2 | 7.2 | 7.8 | 7.6 | 11.0 | 11.0 |
| In Armed Forces | 6.7 | 7.0 | 5.5 | 10.3 | 8.4 | 12.7 | 12.0 |
| Teaching Other Subjects | 6.2 | 5.4 | 8.2 | 7.5 | 11.4 | 7.3 | 6.1 |
| Farm Sales, Service or Supply | 5.6 | 5.4 | 3.2 | 2.0 | 2.7 | 4.1 | 5.1 |
| Farming | 3.0 | 2.6 | 3.3 | 3.0 | 3.7 | 4.9 | 7.1 |
| Total Number Qualified | 1038 | 1151 | 1233 | 1314 | 1566 | 1700 | 1743 |
| Total Number Placed in Vo-Ag | 671 | 706 | 742 | 809 | 891 | 866 | 864 |



The major changes noted last year were an increase in the number entering the armed forces; farm sales, service and supply; and farming. The most important change, however, was in terms of the percent teaching vocational agriculture. This percentage has decreased consistently for the past seven years and made its sharpest decrease last year.

Numbers Qualified in Agricultural Education

It would appear that there should be a close relationship between the number of agricultural teachers qualified and the number of persons enrolled in agricultural colleges. A comparison of these enrollments is shown in Table 3. This table shows a more rapid increase in agricultural college enrollments than in enrollments in agricultural education. It does show, however, that the percent of total college enrollments in agricultural education has remained constant since 1965. Figure I shows the same figures in graphic form.

TABLE 3

ENROLIMENT IN COLLEGES OF AGRICULTURE

COMPARED WITH NUMBERS QUALIFIED IN AGRICULTURAL EDUCATION
1959-1971

| Academic Year | Enrollment in Agriculture | | Percent | Number Qual in Agricult Education | ified tural | Percent | Percent of Agriculture Enrollment |
|------------------|------------------------------|---|---------|---|----------------|---------|---|
| 1959-60 | 33,968 | = | 100% | 1,324 | 10 | 100% | 3.9 |
| 1964-65 | 39,623 | | 116.6 | 1,110 | | 83.8 | 2.8 |
| 1968-69 | 52,935 | | 155.8 | 1.,566 | | 118.2 | 3.1 |
| 1969-70 | 57,517 | | 169.3 | 1,700 | | 128.4 | 3.0 |
| 1970-71 | 62,863 | | 185.0 | 1,743 | | 131.6 | 2.8 |

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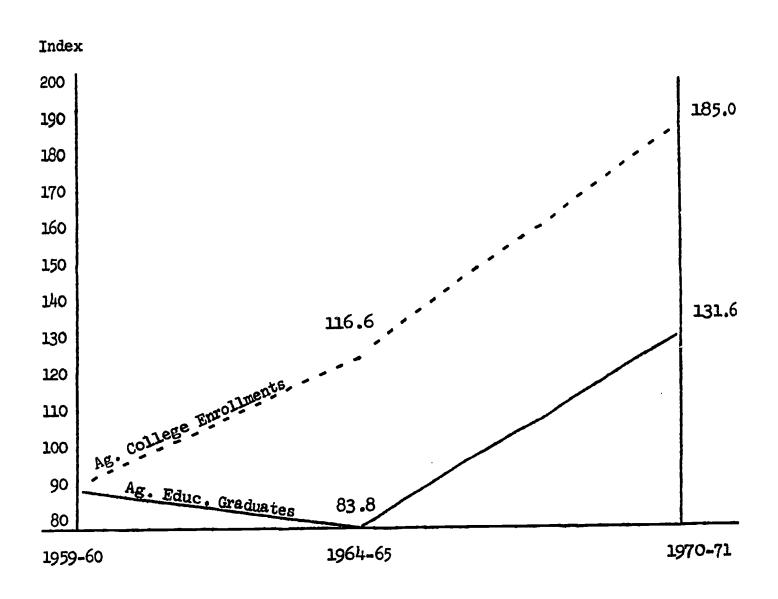


Figure 1: Comparison of Agricultural College enrollments and numbers qualified for teaching vocational agriculture.

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A Seven Year Comparison of Teacher Supply and Demand

A seven year comparison of the number of positions in teaching vocational agriculture shows little change during this period. The highest number of teaching positions was shown in 1968 when there were 10,606.

The seriousness of the teacher shortage is shown in the column entitled "Teachers Needed But Not Available August 1." This indicates that the teacher shortage reached it's height in 1968 and has been alleviated since, but that last year 120 more teachers were needed than were available.

A SEVEN YEAR COMPARISON OF SELECTED INFORMATION ON SUPPLY AND DEMAND OF TEACHERS OF VOCATIONAL AGRICULTURE

| Year | Total No. of Posi- tions | Teachers Needed But Not Available August l | Total Qualified for Teaching | Percent Qualified Entering Vo-Ag Teaching |
|------|--------------------------|--|------------------------------------|---|
| 1965 | 10,378 | 120 | 1,038 | 64.6 |
| • | 10,325 | 162 | 1,151 | 61.4 |
| 1966 | • | 232 | 1,233 | 60.2 |
| 1967 | 10,221 | 141 | 1,314 | 61.6 |
| 1968 | 10,560 | 121 | 1,566 | 56.9 |
| 1969 | • | 171 | 1,700 | 51.0 |
| 1970 | 10,520 | · | 1,743 | 49.6 |
| 1971 | 10,438* | 120 | -, 1 .5 | |

^{*}The figure for 1971 does not include 897 teachers of agricultural technicians in technical institutes, community colleges and similar institutions.



Changes in Teacher Responsibilities

Some of the changes in vocational agriculture teaching positions are shown in Table 5. This table shows that 61.2% of teachers taught both high school and continuing education classes for adult and young farmers. Only 228 were full time teachers of adult and young farmer classes. 92% of the vocational agriculture positions were located in comprehensive or general high schools and only 3.2% in area vocational schools. About 62% of the teachers were in single teacher departments, as compared to 65% in the previous year.

About 43% of all teachers were full time teachers of production agriculture, which was about the same as the previous year. The number of teachers combining production agriculture with one or more classes in specialized programs such as Agricultural Supply, Agricultural Mechanics, etc. represented 39.2% of the total.

The number of teachers with full-time responsibility for specialized programs, such as Agricultural Supplies, Agricultural Mechanics, Agricultural Products, etc. remained low. Only 747 such full time positions existed, and this represented only 7.2% of the total.

For the first time supervisors were asked this year to indicate the number of teachers in their respective states by months of employment.

Traditionally teaching vocational agriculture has been a twelve month job, and the responses indicate this is still true for most teachers.

9,092 teachers, or 87.1% of the total number, were reported to be on 12 month contracts; and an additional 925, or 8.9%, were employed for 11 months. This accounts for 96% of all teachers as employed for either 11 or 12 months per year.

of the remaining teachers only 335, or 3.2%, were employed on 10 month contracts; while 86 teachers, representing .8% of the total, were on 9 month contracts.



TABLE 5

TYPES OF TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
IN 1971

| Type of Position | Number | Percent |
|---|--------|---------|
| By Kind of Students | | |
| Teachers of adult and young farmer classes only | 228 | 2.2 |
| Teachers of high school classes only | 3825 | 36.6 |
| Teachers of both high school and out-of-school classes (adult and/or young farmer classes) | 6385 | 61.2 |
| Teachers of agriculture in community or junior colleges, or technical institutes | 897 | |
| By Kind of School | | |
| Teachers in general or comprehensive high schools | 9589 | 91.9 |
| Teachers in area vocational schools | 332 | 3.2 |
| Teachers in vocational high schools | 517 | 4.9 |
| By Size of Staff | | |
| Teachers in single teacher departments | 6474 | 62.0 |
| Teachers in multiple teacher departments | 3964 | 38.0 |
| By Kind of Programs | | |
| Teachers in full time production agriculture programs | 4456 | 42.7 |
| Teachers in part-time production agriculture programs and had one or more classes in specialized programs such as Agricultural Supplies, Agricultural Mechanics, etc. | 4092 | 39.2 |
| Teachers in full time specialized programs such as Agricultural Supplies, Agricultural Mechanics, Agricultural Products, etc. | 747 | 7.2 |
| Teachers in some combination of agricultural and academic subjects | 1143 | 10.9 |



Agricultural Education Graduates by States and Regions

There was a close relationship between the regions with the largest number of teaching positions and those producing the largest number of qualified graduates. The Southern Region, for example, had 4887 teaching positions, produced 822 qualified graduates of which 382 were placed in teaching representing 46.5% of the total. The Facific Region had the highest placement rate with 69.3%.

TABLE 6

PLACEMENT OF AGRICULTURAL EDUCATION GRADUATES
BY REGIONS IN 1971

| Region | Teaching Positions | Number Qualified Graduates | Number Placed in Teaching Vo-Ag | % Placed in Teaching Vo-Ag |
|-------------------|-----------------------|-------------------------------|------------------------------------|-------------------------------|
| Southern | 4887 | 822 | 382 | 46.5 |
| Central | 3337 | 610 | 301 | 49.3 |
| Pacific | 1257 | 205 | 142 | 69.3 |
| North Atlantic | 957 | 106 | 39 | 36.8 |

A comparison of the numbers of teaching positions in each of the states and regions is shown in Table 7. The number of teacher replacements was highest in the Central Region which required 402 teachers, followed by the Southern Region which required 362. The Atlantic Region had a need for 74 teachers and the Pacific Region 146.



TABLE 7
TEACHING POSITIONS IN VOCATIONAL AGRICULTURE
BY STATES AND REGIONS, AUGUST, 1971

North Atlantic Region

| State | Total Positions 8/1/71 | Change in Total Positions Since 8/1/70 | Estimated Number of Teachers Needed by 1975 | Number of New and Replace- ment Teachers Employed to 8/1/71 | Teachers Still Needed 8/1/71 | Total Teachers Needed |
|------------------|------------------------|--|---|--|---------------------------------------|-----------------------------|
| Pennsylvania | 298 | + 8 | 320 | 31 | 11 | 42 |
| New York | 256 | + 5 | 275 | 16 | 0 | 1 6 |
| West Virginia | 94 | - 2 | 80 | 3 | 0 | 3 |
| Maryland | 68 | + 1 | 87 | 3 | 4 | 7 |
| Massachusetts | <i>5</i> 7 | 0 | 67 | 4 | 0 | 4 |
| Connecticut | 4 4 | + 2 | 50 | 4 | 1 | 5 |
| New Jersey | 40 | 0 | 75 | 3 | 3 | 6 |
| | 31 | + 3 | 40 | 5 | 2 | 7 |
| Vermont | 19 | + 2 | 30 | 0 | 0 | 0 |
| Delaware | 21 | - 1 | 30 | 2 | 3 | 5 |
| Maine | 14 | + 1 | 25 | 1 | 1 | 2 |
| Rhode Island | 15 | + 3 | 25 | 2 | 0 | 2 |
| New Hampshire | | - | | | | - |
| TOTAL FOR REGION | 957 | + 22 | 1104 | 7 ¹ 4 | 25 | 99 |



TABLE 7 (continued)

TEACHING POSITIONS IN VOCATIONAL AGRICULTURE BY STATES AND REGIONS, AUGUST, 1971

Central Region

| State | Total Positions 8/1/71 | Change in Total Positions Since 8/1/70 | Estimated Number of Teachers Needed by 1975 | Number of New and Replace- ment Teachers Employed to 8/1/71 | Teachers Still Needed 8/1/71 | Total Teachers Needed |
|---------------------|------------------------|--|---|---|---------------------------------------|-----------------------------|
| Illinois | 458 | + 1 | 657 | 43 | 0 | 43 |
| | 474 | +16 | 600 | 48 | 5 | 53 |
| Ohio | 406 | +22 | 500 | 5 6 | 6 | 62 |
| Minnesota | 328 | + 1 | 340 | 35 | 0 | 35 |
| Wisconsin | 284 | - 1 | 280 | 30 | 0 | 30 |
| Kentucky Indiana | 267 | + 2 | 300 | 46 | 6 | 52 |
| Missouri | 247 | +10 | 290 | 24 | 0 | 24 |
| | 241 | 0 | 260 | 34 | 0 | 34 |
| Iowa | 184 | + 1 | 180 | 21 | 3 | 24 |
| Michigan Kansas | 172 | + 1 | 195 | 30 | 1 | 31 |
| Nebraska | 133 | + 6 | 150 | 27 | 0 | 27 |
| North Dakota | 79 | + 8 | 100 | 0 | 5 | 5 |
| South Dakota | 64 | 0 | 75 | 8 | 2 | 10 |
| DOMMI DAYO CT | | - | Allements | | - | فستبيين |
| TOTAL FOR REGION | 3337 | +67 | 3927 | 402 | 28 | 430 |

TABLE 7 (continued)

TEACHING POSITIONS IN VOCATIONAL AGRICULTURE BY STATES AND REGIONS, AUGUST, 1971

Pacific Region

| State | Total Positions 8/1/71 | Change in Total Positions Since 8/1/70 | Estimated Number of Teachers Needed by 1975 | Number of New and Replace- ment Teachers Employed 8/1/71 | Teachers Still Needed 8/1/71 | Total Teachers Needed |
|------------------|------------------------|--|---|--|---------------------------------------|-----------------------------|
| California | 459 | +28 | 530 | 45 | 6 | 51 . |
| • | 160 | + 1 | 200 | 20 | 3 | 23 |
| Washington | 136 | + 3 | 130 | 22 | 4 | 26 |
| Oregon | 76 | + 2 | 95 | 10 | 0 | 10 |
| Colorado | · | 0 | 78 | 7 | 0 | 7 |
| Idaho | 70 | | 65 | 5 | 0 | 5 |
| Utah | 62 | + 1 | 83 | 12 | 0 | 12 |
| New Mexico | 74 | + 2 | _ | 14 | 1 | 15 |
| Montana | 67 | + 5 | 75 | | | 6 |
| Arizona | 58 | + 8 | 70 | 6 | 0 | |
| Wyoming | 47 | - 4 | 48 | 0 | 0 | 0 |
| Hawaii | 31 | + 1 | 35 | 2 | 0 | 2 |
| Nevada | 17 | 0 | 25 | 3 | 0 | 3 |
| 616 V | | - | | | | |
| TOTAL FOR REGION | 1257 | ·47 | 1434 | 146 | 14 | 160 |

TABLE 7 (continued)

TEACHING POSITIONS IN VOCATIONAL AGRICULTURE BY STATES AND REGIONS, AUGUST, 1971

Southern Region

| State | Total Positions 8/1/71 | Change in Total Positions Since 8/1/70 | Estimated Number of Teachers Needed by 1975 | Number of New and Replace- ment Teachers Employed to 8/1/71 | Teachers Still Needed 8/1/71 | Total Teachers Needed |
|--------------------------------|------------------------------|--|---|---|---------------------------------------|-----------------------------|
| Texas | 1207 | +25 | 1425 | 25 | 0 | 25 |
| North Carolina | 541 | - 32 | 600 | 16 | 3 | 19 |
| Alabama | 392 | + 2 | 475 | 42 | 5 | 47 |
| Oklahoma | 387 | + 4 | 395 | 35 | 0 | 35 |
| Georgia | 349 | - 3 | 400 | 37 | 6 | 43 |
| Virgin ia | 352 | + 3 | 375 | 42 | 8 | 50 |
| Florida | 349 | +24 | 485 | 40 | 10 | 50 |
| Mississippi | 242 | + 3 | 272 | 11 | 2 | 13 |
| Louisiana | 293 | + 1 | 310 | 35 | 0 | 35 |
| Arkansas | 259 | - 5 | 225 | 27 | 9 | 36 |
| South Carolina | 252 | -16 | 275 | 30 | 7 | 37 |
| Tennessee | 264 | - 6 | 275 | 22 | 3 | 25 |
| TOTAL FOR REGION | 4887 | 0 | 5512 | 362 | 53 | 415 |
| TOTAL FOR THE UNITED STATES | 10,438* | 136+ | 11,977 | 984 | 120 | 1,104 |

^{*}Plus 897 Teachers of Agricultural Technicians in Technical Institutes, Junior and Community Colleges.



Number of Teachers Prepared by State and Region

Table 8 shows that of 1,743 persons prepared for teaching vocational agriculture in the United States in 80 different institutions, that 864 became teachers of vocational agriculture, 210 entered the armed forces, and 669 were otherwise employed. The largest number of teachers, 822 were prepared in the Southern Region, followed by 610 in the Central Region. Two hundred and five were prepared in the Pacific Region and 106 in the North Atlantic Region.

In most states one university has been designated for preparation of teachers of vocational agriculture. States with more than one institution preparing teachers of vocational agriculture included Texas with 9; Illinois and Louisiana with 4; Alabama, Arkansas, California, Kentucky and Wisconsin with 3 each; and Delaware, Florida, Georgia, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia each with two.

A comparison of the number of teachers qualified and the numbers employed but not teaching in Table 9, shows that all of the regions had an appreciable number of qualified persons entering other positions. It also shows that few persons, qualified as teachers, left their home states to find employment.

Table 10 lists all states with 12 or more Agricultural Education graduates employed but not teaching vocational agriculture. These states may well represent desirable places to look for teachers of vocational agriculture by those anticipating a shortage. Table 10 shows that the first three states listed - Texas, Illinois and Kentucky - had a total of 250 qualified persons last year who were employed in occupations other than teaching vocational agriculture.



TABLE 8

EMPLOYMENT OF GRADUATES IN AGRICULTURAL EDUCATION
BY STATES AND REGIONS DURING THE 1970-71 SCHOOL YEAR

| | | Number of | Qualified | Graduates: | Total |
|---------------------|--|-----------|-----------|-----------------------|------------------------|
| | Institutions | Teaching | In Armed | Otherwise Employed | Qualified Graduates |
| State | Reporting | Vo-Ag | Forces | Emproyed | <u></u> |
| | North Atla | ntic Regi | on | | |
| Connecticut | University of Connecticut | . 1 | 1 | 3 | 5 |
| Delaware | University of Delaware | 2 | 0 | 2 | 4 |
| | Delaware State College, Dover | 1 | 0 | 0 | 1 |
| Maine | University of Maine | no de | epartment | | |
| Maryland | University of Maryland | 2 | 1. | 3 | 6 |
| | University of Maryland, Eastern Shore | 1 | 2 | 2 | 5 |
| Massachusetts | University of Massachusetts | 1 | 0 | 3 | 4 |
| New Hampshire | University of New Hampsh | ire 3 | 0 | 0 | 3 |
| New Jersey | Rutgers University | 0 | 2 | 11 | 13 |
| New York | Cornell University | 6 | 4 | 12 | 22 |
| Pennsylvania | Penn. State University | 14 | 1 | 12 | 27 |
| Rhode Island | University of Rhode Isla | ınd 4 | 1. | 2 | 7 |
| Vermont | University of Vermont | 2 | 0 | 2 | 4 |
| | . West Virginia Universit | y 2 | 0 | 3 | 5 |
| _ | | | | | |
| TOTAL FOR REGION | · | 39 | 12 | 55 | 106 |

TABLE 8 (continued)

EMPLOYMENT OF GRADUATES IN AGRICULTURAL EDUCATION
BY STATES AND REGIONS DURING THE 1970-71 SCHOOL YEAR

| a to be | Institutions Reporting | Number of Teaching Vo-Ag | Qualified In Armed Forces | Graduates: Otherwise Employed | Total Qualified Graduates |
|---------------------|-----------------------------------|--------------------------------|---------------------------|-------------------------------------|---------------------------------|
| State | | L Region | | | |
| Tllinoi s | Illinois State University | - | 12 | 29 | 64 |
| TTTHOTS | Southern Illinois Univer | | ı | 15 | 24 |
| | University of Illinois | 6 | 5 | 9 | 20 |
| | Western Illinois Univers | ity 7 | 1 | 8 | 16 |
| Indiana | Purdue University | 21 | s | 22 | 45 |
| Iowa | Iowa State University | 29 | 8 | 8 | 45 |
| Kansas | Kansas State University | 13 | 9 | 12 | 34 |
| Kentucky | Murray State University | 13 | 0 | 3 | 16 |
| 17011 440-1 | University of Kentucky | 6 | 2 | 12 | 20 |
| | Western Kentucky Univer | sity 9 | 0 | 9 | 18 |
| Michigan | Michigan State Universi | | 1 | 9 | 25 |
| Minnesota | University of Minnesota | | 4 | 10 | 38 |
| Missouri | University of Missouri | 1 8 | 6 | 7 | 31 |
| Nebra ska | University of Nebraska | 15 | 9 | 16 | 40 |
| North Dakota | North Dakota State Univ | . 10 | 6 | 4 | 20 |
| Ohio | Ohio State University | 43 | 8 | 21 | 72 |
| South Dakota | South Dakota State Univ | 7. 11 | 9 | 2 | 22 |
| Wisconsin | University of Wisconsin | 1 4 | 1 | .4 | 9 |
| | Wisconsin State Univ River Falls | . 15 | 2 | 14 | 31 |
| | Wisconsin State Univ. Platteville | . 11 | 1 | 8 | 20 |
| TOTAL FOR REGION | - | 301 | 87 | 222 | 610 |

TABLE 8 (continued)

EMPLOYMENT OF CRADUATES IN ACRICULTURAL EDUCATION
BY STATES AND REGIONS DURING THE 1970-71 SCHOOL YEAR

| | DI STATES AND IMPACT. | Wumber of | Qualified | Graduates: | Total |
|---------------------|------------------------------------|-------------------|--------------------|-----------------------|------------------------|
| State | Institutions | Teaching Vo-Ag | In Armed Forces | Otherwise Employed | Qualified Graduates |
| Sta te | Pacific | Region | | | |
| Arizona | University of Arizona | 6 | 3 | 1 | 10 |
| California | California State Polytechr | ic 17 | 1 | 1 | 19 |
| | University of California, Davis | 13 | 2 | 0 | 1 5 |
| | Fresno State | 17 | 0 | 2 | 1 9 |
| Colorado | Colorado State University | 15 | 6 | 11 | 32 |
| Idaho | University of Idaho | 12 | 2 | 6 | 20 |
| Montana | Montana State University | 10 | 1 | 2 | 13 |
| Nevada | University of Nevada | 4 | 1 | 0 | 5 |
| New Mexico | New Mexico State Universi | ty 14 | 1 | 5 | 20 |
| Oregon | Oregon State University | 10 | 3 | 1 | 14 |
| Utah | Utah State University | 4 | 0 | 6 | 10 |
| Weshington | Washington State Universi | ity 14 | 1 | 1 | 16 |
| Wyoming | University of Wyoming | 6 | 2 | 4 | 12 |
| TOTAL FOR REGION | | 142 | 23 | 40 | 205 |

TABLE 8 (continued)

EMPLOYMENT OF GRADUATES IN AGRICULTURAL EDUCATION
BY STATES AND REGIONS DURING THE 1970-71 SCHOOL YEAR

| | · · · · · · · · · · · · · · · · · · · | Number of | Qualified | Graduates: | Total |
|-------------------|---------------------------------------|-----------------|-----------|------------|------------------------|
| | Institutions | Teaching | In Armed | Otherwise | Qualified Graduates |
| State | Reporting | Vo-Ag | Forces | Employed | Gradustes |
| | Souther | n Region | | | |
| Alabama | Alabama A & M College | 1 | 0 | 2 | 3 |
| | Auburn University | 30 | 5 | 16 | 51 |
| | Tuskeegee Institute | 2 | 0 | 8 | 10 |
| Arkansas | A. M. & N. College | 5 | 2 | 6 | 13 |
| | Arkansas State University | 10 | 2 | 11 | 23 |
| | University of Arkansas | 5 | 5 | 5 | 15 |
| Florida | Florida A & M University | 3 | 0 | 0 | 3 |
| | University of Florida | 25 | 0 | 2 | 27 |
| Georgia | Fort Valley State College | . 1 | 0 | 7 | 8 |
| | University of Georgia | 9 | 0 | 6 | 15 |
| Louisiana | Louisiana State Universit | _{ty} 6 | 1 | 7 | 14 |
| | Southern Louisiana | 1 | 1 | 5 | 7 |
| | University of S. W. Louisiana | 7 | 2 | 5 | 14 |
| | Louisiana Tech. Univ. | 3 | 1 | 3 | 7 |
| Mississippi | Alcorn A & M College | 7 | 8 | 18 | 33 |
| | Mississippi State Univer | sity 26 | 1 | 3 | 30 |
| North Carolina | North Carolina State University | 13 | 3 | 16 | 32 |
| | A & T State University | 3 | 0 | 9 | 12 |
| Oklahoma | Oklahoma State Universit | _y 32 | 5 | 31 | 68 |
| Puerto Rico | (no report) | | | | |



TABLE 8 (continued)

EMPLOYMENT OF GRADUATES IN AGRICULTURAL EDUCATION
BY STATES AND REGIONS DURING THE 1970-71 SCHOOL YEAR

| MIMDER OF MUCLIFICA OF WARE | | | | | Total |
|-----------------------------|------------------------------------|-----------|----------|-----------|------------------------|
| | | Teaching | In Armed | Otherwise | Qualified Graduates |
| State | Reporting | Vo-Ag | Forces | Employed | Graduates |
| | Southern Regi | on (conti | nued) . | | |
| South | Clemson University | 10 | 2 | 14 | 26 |
| Carolina | South Carolina State Colle | ege 0 | 14 | 4 | 8 |
| Tennessee | Tenn. A & I State Universi | ity 10 | 5 | 8 | 23 |
| | University of Tennessee | 10 | 1 | 3 | 14 |
| Texas | Texas A & M University | 25 | 12 | 24 | 61 |
| | East Texas State Universi | ty 31 | 6 | 12 | 49 |
| | Prairie View A & M Colleg | e 0 | 1 | 1 | 2 |
| | Sam Houston College | 32 | 6 | 25 | 63 |
| | South West Texas State College | 4 | 3 | 8 | 15 |
| | Stephen F. Austin State College | 5 | 3 | 14 | 22 |
| | Tarleton State College | 26 | 3 | 40 | 69 |
| | Texas College of A & I | 9 | 3 | 3 | 15 |
| | Texas Technological Colle | ege 12 | 2 | 29 | 43 |
| Virginia | Virginia State College | 3 | 1 | 3 | 7 |
| | Virginia Polytechnic Institute | 16 | 0 | 4 | 20 |
| TOTAL FOR REGION | | 382 | 88 | 352 | 822 |
| TOTAL FOR THE UNITED | STATES | 864 | 210 | 669 | 1743 |

TABLE 9

AGRICULTURAL EDUCATION GRADUATES EMPLOYED
OUTSIDE THE STATE WHERE QUALIFIED
- BY REGION

| Region | Teachers Qualified | Employed But Not in Teaching | Employed Outside the State |
|-----------------|-----------------------|------------------------------|-------------------------------|
| North Atlantic | 106 | 55 | 7 |
| Central Region | 610 | 222 | 29 |
| Pacific Region | 205 | 40 | 18 |
| Southern Region | 822 | 352 | 38 |
| TOTAL | 1743 | 669 | 92 |

Suggestions to States With Teacher Shortages

Tables 9 and 10 are included in this year's study in order to aid those who may wish to find additional teachers from other states. Table 9 shows that a sizable number of persons who were qualified for teaching entered other fields - 669. Probably some of these persons would have entered teaching had the opportunity been presented to them at the time they were first qualified. Another figure with implications for teacher placement is that only 92 persons, or less than 8% of those employed, were employed outside their home states. Table 10 presents a list of 18 states where 12 or more persons, who were qualified for teaching vocational agriculture, entered other employment. Such states should be promising sources of teachers for those willing to compete for them in the job market.

Interstate efforts at teacher placement have not been widely practiced in agricultural education in the past but would seem to offer one means of alleviating the shortage of teachers of vocational agriculture.



TABLE 10

STATES WITH TWELVE OR MORE AGRICULTURAL EDUCATION GRADUATES EMPLOYED IN FOSITIONS OTHER THAN TEACHING VOCATIONAL AGRICULTURE

| | Total Qualified | Employed in Other Positions |
|-----------------------|--------------------|--------------------------------|
| State | Augriio | 156 |
| Texas | 339 | |
| Illinois | 124 | 61. |
| Kentucky | 79 | 33 |
| | 68 | 31 |
| Oklahoma | 64 | 26 |
| Alabama | 50 | 26 |
| Wisconsin | 48 | 22 |
| Arkansas | | 22 |
| Indiana | 45 | |
| Mississippi | 63 | 21 |
| Ohio | 72 | 21 |
| Louisiana | 42 | 20 |
| South Carolina | 34 | 18 |
| | 32 | 16 |
| North Carolina | 40 | 16 |
| Nebraska | 85 | 14 |
| California | | 12 |
| Kansas | 34 | |
| New York | 22 | 12 |
| Pennsylva ni a | 27 | 12 |



APPENDIX



Appendix I

RETURN TO:

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By August 15, 1971

SURVEY OF TEACHER SUPPLY AND DEMAND IN VOCATIONAL AGRICULTURE

| Name | Position | State |
|------|--|--------|
| 1. | Number of teachers of vocational agriculture employed in your state during the 1970-71 school year. (Do not include teachers in Technical Institutes and Community Colleges.) | ce . |
| 2. | Number of replacements required for the above teachers during the year. | |
| 3• | Number of new and additional positions in teaching vocational agriumnth became available during the past year (7/1/70 to 6/30/71). Number of positions discontinued. Net gain in number of positions past year. | itions |
| 4. | Number of newly qualified candidates for teaching vocational agristill available (8/1/71). | |
| 5• | Number of vocational agriculture teachers still needed (7/1/71) be available in your state. | ut not |
| 6. | Number of vocational agriculture teachers last year who held emer or temporary certificates. | gency |
| 7• | Number of departments which probably will not operate this year because of a shortage of teachers. | |
| 8. | Estimated total number of teaching positions in vocational agricular full-time equivalents in your state by 1975. | ılture |
| 9• | Of the total number of vocational agriculture teachers reported : Item 1, how many teachers: | in |
| | 9.1 taught adult and young farmer classes only | |
| | 9.2 taught high school classes only | |
| | 9.3 taught both high school and out-of-school classes (adult an young farmer classes) | |
| | (9.1 + 9.2 + 9.3 should equal the number of teachers reported in Item 1.) | |



| How many teachers reported in Item 1: |
|--|
| 9.5 taught in general or comprehensive high schools |
| 9.6 taught in vocational high schools |
| 9.7 taught in area vocational schools |
| (9.5 + 9.6 + 9.7 should equal the number of teachers reported in Item 1.) |
| How many teachers reported in Item 1: |
| 9.8 taught in single teacher departments |
| 9.9 taught in multiple teacher departments |
| (9.8 + 9.9 should equal the number of teachers reported in Item 1.) |
| How many teachers reported in Item 1: |
| 9.10 taught full time in production agriculture programs |
| 9.11 taught part-time in production agriculture programs and had one or more classes in specialized programs such as Agricultural Supplies, Agricultural Mechanics, Agricultural Products (processing), Ornamental Horticulture, Agricultural Resources and Recreation, and Forestry |
| 9.12 taught full time in programs such as Agricultural Supplies, Agricultural Mechanics, Agricultural Products (processing), Ornamental Horticulture, Agricultural Resources and Recreation, and Forestry |
| 9.13 taught some combination of agricultural and academic subjects |
| (9.10 + 9.11 + 9.12 + 9.13 should equal the number of teachers reported in Item 1.) |
| How many teachers reported in Item 1 had contracts for employment of: |
| 9.14 Nine months 9.15 Ten months 9.16 Eleven months 9.17 Twelve months |
| (9.14 + 9.15 + 9.16 + 9.17 should equal the number of teachers reported in Item 1) |
| 10. In addition to the teachers of vocational agriculture reported in Item 1, how many teachers were employed as teachers of agriculture in: |
| Community or Junior Colleges |
| Technical Institutes |
| RJW:zp |



Appendix II

| Number qualified for your college or univ | teaching vocation ersity 6/30/70 to | 7/1/71 |
|--|-------------------------------------|--|
| Of those qualified a following occupation | bove, how many had is by 8/15/71: | l entered the |
| Teaching Vo-Ag Teaching other subjection sales service of those qualified imany were employed in outside your state? | ects or supply In 1970 how | Farming Graduate work Armed Forces Other |
| Total undergraduate agricultural educati 1970-71 | enrollment in agri | iculture including ution for the year |
| Signed | Institut | ion |

