Exploring Agricultural Careers: The Present World of Work.

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The booklet is designed primarily for use in teaching students about careers and the importance of work; it provides introductory information about agricultural occupations presented at the reading level of students normally enrolled in high school agricultural classes. Among the fundamental principles which should be taken into consideration when early decisions about agricultural careers are made, are these: Many occupations in agribusiness tend to be similar to those of other businesses from the standpoint of benefits to the worker, yet, in certain agricultural occupations there is a great deal of difference; the hours of work, fringe benefits, and methods of pay for farm work, for instance, often vary from routine industrial work. Further information is presented on the organization of work, the trend in working conditions, the role of labor unions, labor legislation, and discussion of labor market trends and the possibilities for small businesses. Two pages of questions for discussion and activities to perform conclude the booklet. (Author/AJ)
Exploring Agricultural Careers:
THE PRESENT WORLD OF WORK

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Publication AB - 5
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In Cooperation With
Agricultural Education Service
Division of Vocational Education
State Department of Education
Richmond, Virginia

1975
Preface

The need for youth to understand how the world of work "operates" is becoming increasingly important. Early decisions about careers, even though tentative, should take certain fundamental principles into consideration. For example, hours of work, fringe benefits, and bases for pay are definitely factors of which some knowledge is needed.

This booklet provides certain basic information about work, especially as related to agricultural occupations. Many occupations in agribusiness tend to be similar to those of other businesses from the standpoint of benefits to the worker. Yet, in certain agricultural occupations there is a great deal of difference. A good example is work on a farm. The hours of work, fringe benefits, and methods of pay for farm work often vary from routine industrial work. This publication is introductory in nature. Persons desiring further information should refer to the references listed on page 35.
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To The Teacher

The publication presented here is the second in a series designed primarily for use in teaching students about careers and the importance of work. The first publication was entitled "Exploring Agricultural Careers: The Importance of Work." These documents may be used to complement each other or singly, as a teacher or student desires. Teachers may find it beneficial to provide each student with a copy for classroom use. The reading level of students normally enrolled in high school agricultural classes has been kept in mind in the preparation of this publication.

The content of this publication is designed to be used in conjunction with Exploring Agricultural Careers: A Curriculum Guide for Agricultural Education, published by the Agricultural Education Program, Virginia Polytechnic Institute and State University. The following information is given to assist the teacher in correlating it with the Curriculum Guide:

Major Area: I. Exploring the World of Work
Unit: I. Our Working World

Acknowledgements

Special appreciation is expressed to Dr. Dale Oliver, Associate Professor, Division of Vocational and Technical Education, Virginia Polytechnic Institute and State University, for reviewing the manuscript. Dr. James P. Clouse, Professor and Program Leader for Agricultural Education at Virginia Polytechnic Institute and State University, also provided numerous helpful suggestions.
Introduction

The total labor force in the United States is now more than 92 million persons. This represents an increase from 63 million in 1950 and 72 million in 1960. Projections in terms of the number of persons available to work indicate that it will be even larger in the 1980's. Young people must be aware of the present world of work, including the agricultural sector of it. They must begin thinking about how they can find a satisfactory place for themselves in it. This does not mean that they must select a career, but that they must begin to assess themselves in terms of certain work activities. A good way to begin is with a broad understanding of the present world of work.

This booklet is designed to answer the following questions:

1. Does work change? How has it changed?
2. Where do people work?
3. How is work organized?
4. What is the trend in working conditions?
5. What is the role of labor unions?
6. How are persons paid for work?
7. What are fringe benefits?
8. What laws apply to work?
9. Which areas of work have the best future?
10. What is the possibility of owning your own business?
1. Does work change? How has it changed?

Work changes! These changes apply to both agricultural and non-agricultural jobs. New skills may be required. For example, a farmer is constantly adopting new practices which require him to change his manner of work. The practices followed by employers in agribusiness also change. Workers must be willing to learn new skills and accept changes in practices. Without this flexibility, one may find himself missing a promotion or failing to receive an increase in pay. In some cases, workers who fail to adjust to changes lose their jobs. Changes should be viewed as making work interesting and exciting, as well as more productive. There are very few people who do not like to learn new things and have new experiences. Yet, many persons have a fear of new ways of doing their work.

Primarily, changes in work have occurred in three main areas: (1) the location of work, (2) technology in work, and (3) skill requirements for work. These changes are found in both agricultural and non-agricultural jobs.

Location

"Location of work" refers to where work is found. In the early history of the United States most people worked at or near their homes. Practically everyone farmed. In 1790, 90 percent of all persons in the United States lived on farms. The average person needed little money. Most of the food and clothing was produced at home. Only necessary items which could not be produced at home, such as sugar, flour, and spices, were purchased. Small communities with one or two general stores were located throughout the countryside.
In the mid-1800's, machinery which reduced the amount of hand labor required to do certain work was invented. People began to move away from the farm areas to be near work in factories. Also, factories to build the machinery were set up. Some of the small settlements became towns, and some of the towns became large industrial cities. Other small communities dwindled away and no longer exist.

Today millions of people live in or near large cities. Examples of such cities include Los Angeles, New York, Chicago, and Detroit. Many people have moved from rural areas to these and other cities. Large factories in which people work at many different jobs are found there. The trend of movement from rural areas to the cities still exists, but it is not as great as it was a few years ago. In fact, the reverse trend of moving from cities to rural areas exists in some places.

In many areas that still remain relatively rural, the trend has also been for the towns and cities to grow. This has occurred because manufacturing plants have been located there by larger industries. Many people have moved into the towns and cities to be close to these smaller plants. Persons desiring certain kinds of work have often found it necessary to move to the location of the work. Also, people have frequently had to move because of economic reasons. The rural areas often did not have adequate job opportunities, and hence there was no way for people to earn a living.

Technology in work

Changes in work have occurred due to advances in technology. Technology is the application of science to the production of goods and services. It has occurred in agriculture, just as other areas.
Figure 1. Changes in Work Have Been Brought About by Mechanical Inventions. (This photograph shows a self-propelled windrower preparing hay.) (Photograph courtesy New Holland Division, Sperry Rand Corporation, New Holland, Pennsylvania)

Automation is often included with technology. It involves producing goods and services with machinery rather than by hand labor; that is, mechanical power has replaced animal power. In effect, technology and automation have joined together to reduce hand labor.
Workers in many areas of agriculture must be able to use complex machinery. They must also be able to adapt their skills to use new machinery which may become available later. Some workers may be replaced by the new machinery. When this occurs, it is necessary for them to secure employment in other occupations, either in agriculture or other areas. It may also be necessary to learn new skills.

A good example of the effect of technology and automation on work in production agriculture is the invention and perfection of certain machinery, especially apple pickers, combines, planters, and sprayers. The reaper was an early invention to harvest grain (wheat). Reapers have been replaced by combines. The reaper was developed by Cyrus McCormick in 1831. Before 1830 nearly 56 man-hours were required to produce an acre of wheat. Since then considerable improvements have been made. Machinery to till the soil and plant the seed has also been perfected. Now an acre of wheat can be produced with about two man-hours of labor.

Some of the major inventions that have helped to advance technology are shown in Figure 2. Note that many of these are directly related to agriculture.
Figure 2. Important Inventions.

<table>
<thead>
<tr>
<th>INVENTION</th>
<th>DATE</th>
<th>INVENTOR</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheel</td>
<td>3000 B.C.</td>
<td>Unknown</td>
<td>Asia</td>
</tr>
<tr>
<td>Paper from pulp</td>
<td>105 A.D.</td>
<td>Ts'ai Lun</td>
<td>China</td>
</tr>
<tr>
<td>Cotton Gin</td>
<td>1793</td>
<td>Eli Whitney</td>
<td>United States</td>
</tr>
<tr>
<td>Steamboat</td>
<td>1807</td>
<td>Robert Fulton</td>
<td>United States</td>
</tr>
<tr>
<td>Reaper</td>
<td>1831</td>
<td>Cyrus McCormick</td>
<td>United States</td>
</tr>
<tr>
<td>Steel Plow</td>
<td>1834</td>
<td>John Deere</td>
<td>United States</td>
</tr>
<tr>
<td>Telegraph</td>
<td>1840's</td>
<td>Samuel Morse</td>
<td>United States</td>
</tr>
<tr>
<td>Sewing Machine</td>
<td>1845</td>
<td>Elias Howe</td>
<td>United States</td>
</tr>
<tr>
<td>Steel (from pig iron)</td>
<td>1858</td>
<td>Sir Henry Bessemer</td>
<td>Britain</td>
</tr>
<tr>
<td>Telephone</td>
<td>1876</td>
<td>Alexander Graham Bell</td>
<td>United States</td>
</tr>
<tr>
<td>Incandescent Lamp</td>
<td>1878</td>
<td>Thomas A. Edison</td>
<td>United States</td>
</tr>
<tr>
<td>Gasoline Automobile</td>
<td>1885</td>
<td>Karl Benz and Gottlieb Daumber</td>
<td>Germany</td>
</tr>
<tr>
<td>Airplane</td>
<td>1903</td>
<td>Orville and Wilbur Wright</td>
<td>United States</td>
</tr>
<tr>
<td>Frozen Food Process</td>
<td>1925</td>
<td>Clarence Birdseye</td>
<td>United States</td>
</tr>
<tr>
<td>Television</td>
<td>1926</td>
<td>John L. Bair</td>
<td>Scotland</td>
</tr>
<tr>
<td>Transistor</td>
<td>1948</td>
<td>William Shockley, John Bardeen, and Walter H. Brattain</td>
<td>United States</td>
</tr>
<tr>
<td>Laser</td>
<td>1958</td>
<td>Charles H. Townes</td>
<td>United States</td>
</tr>
</tbody>
</table>
Skill Requirements for Work

The amount of knowledge and skill required to work in most agricultural occupations has greatly increased. In early America, no special education or training was required to work on the small farms and in the shops. Sons usually followed the occupations of their fathers. They learned the skills for farming, forging (blacksmithing), operating a store, and the like, from their fathers.

Today it is often necessary to go to special schools which provide education and skill-training. These schools include universities, colleges, and vocational-technical schools. Many vocational-technical schools have opened in recent years and provide specific training in many occupational areas, including agriculture.

Skilled persons must also be willing to learn new skills. The trend is toward greater and greater amounts of education prior to beginning work. Persons with more education and greater skill usually begin employment in a more advanced job and at a higher level of pay.

2. Where do people work?

Generally, all persons work for either public agencies or private farms, businesses, and industries. The major distinction between these two kinds of agencies is whether or not they are designed to produce a profit. Public agencies are usually not designed to make a profit, but to provide certain services which are difficult for private businesses to furnish at a profit. Primarily, public agencies are operated by the local, state, or federal governments. Other agencies, such as religious
organizations and public services, may also be considered as public agencies.

Examples of governmental agencies employing workers are:

Local government – police departments, tax offices, schools, sanitation departments, street maintenance departments, welfare and social services offices, and others. Not many agricultural jobs are available through local government agencies. However, there are a few, including agriculture teacher and horticulture grounds specialist.

State government – highway maintenance departments, tax collection agencies, law enforcement agencies, inspection and licensing departments, and others. There are a number of agricultural jobs with state-level agencies, such as those with the Department of Agriculture and Commerce.

Federal government – armed forces, secret service, postal service, housing and development, international agencies, and others. The federal government employs a number of people in agricultural jobs through the U. S. Department of Agriculture.

Governmental agencies employ many workers. In 1970, more than 12.5 million people worked for the government. This figure represents an increase over previous years, and it is likely that the number will continue to increase.

Private agencies, or businesses, are usually established to make a profit. The profit goes to the person or persons owning it. Private businesses may be owned by an individual, partnership, corporation, or cooperative (these are the four ways of doing business).

It should be noted that there are a few private agencies which are not designed to make a profit. These usually exist to provide services which might be performed by the government. Such agencies tend to be more efficient than the government might be in providing the service.

Examples of private agencies and businesses are: feed and seed
stores, grocery stores, real estate sales agencies, farm machinery dealers, welding shops, service stations, and industrial corporations.

Businesses are established to produce either goods or services. Goods are wares. Collectively goods are known as merchandise. Examples of goods include clothing, food, and automobiles. All of the items that are shelved in a store are goods. A service involves labor but not the production of tangible goods. Examples of services performed by private businesses include those performed by laundries, funeral homes, and janitorial workers.

Some of the major industries in which people work are listed below:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Employees in 1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>19,393,000</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>14,950,000</td>
</tr>
<tr>
<td>Services</td>
<td>11,577,000</td>
</tr>
<tr>
<td>Transportation and Public Utilities</td>
<td>4,498,000</td>
</tr>
<tr>
<td>Finance, Insurance, and Real Estate</td>
<td>3,679,000</td>
</tr>
<tr>
<td>Construction</td>
<td>3,347,000</td>
</tr>
<tr>
<td>Production Agriculture</td>
<td>3,126,000</td>
</tr>
<tr>
<td>Mining</td>
<td>622,000</td>
</tr>
</tbody>
</table>

3. How is work organized?

Work is organized so that jobs vary considerably. Much of the variation is based on degrees of responsibility, skill, and capacity. Every business has one or more workers in top-level management. These persons are responsible for planning and management. The top level managers have people working under them to assist in implementing the plans. Sometimes these are known as mid-management jobs. Beneath these are technicians and skilled, semi-skilled, and unskilled workers. Persons just beginning work usually start in a lower level job. Advancement to a higher level is based on how well one performs his job and seniority.

Unskilled Jobs. No special education or training is required for unskilled jobs. Persons working in these jobs need to be able to follow instructions accurately. The work involved usually is simple. With many people their first job is unskilled. It is possible for unskilled workers to move into semi-skilled jobs if they are diligent and willing to learn. The number of unskilled workers in agriculture has been declining. Unskilled jobs include most farm laborers, such as fruit pickers, and a number of jobs with no skill requirements in agribusiness.
Semi-skilled Jobs. A small amount of training may be required for semi-skilled jobs. Experience gained in an unskilled job may be all that is needed. At this level some people learn the skills required for a skilled job. The agricultural mechanics helper is an example.

Skilled Jobs. Special training and experiences are usually required to work in a skilled job. The training may be received through a period of apprenticeship, on-job work, or attending a vocational school. An example of a skilled job is the farm machinery mechanic.

Technical Jobs. Special education and training are usually required for a job as technician. A practical knowledge of science and mathematics is needed. Education for technical jobs usually involves two years of schooling beyond high school. Many persons in these jobs have attended technical schools. Examples of occupations include agriculture chemical technicians, agribusiness technicians, and forestry technicians.

Professional Jobs. Generally, a degree from a four-year college is required to enter professional jobs. Sometimes master's and doctor's degrees are required. Examples of professional occupations in agriculture are agriculture teacher, agronomist, veterinarian, and agricultural economist.

Managerial Jobs. The top managerial jobs are usually filled by persons with considerable experience and education. These persons must be able to make decisions and have them carried out. Persons in lower-level jobs are usually involved in carrying out the decisions of managers. Examples include farm managers, chemical company managers, and farm supply store managers.

Small businesses may not have workers specifically employed at all levels. However, there is usually a manager and those who assist him in performing the functions of the business.
4. What is the trend in working conditions?

"Working conditions" refers to the demands that a particular job places on a worker. Changes in the world of work are reflected by working conditions. Four main factors make up working conditions: (1) hours of work, (2) hazards of work, (3) environment of work, and (4) nature of work.

Hours of Work

The number of hours worked in a week for many occupations is based on five days at eight hours per day, or 40 hours per week. Some jobs require more hours per week, especially those in sales, retail stores, and farming. Frequently, persons who work more than 40 hours in a week receive additional pay, known as overtime pay.

The hours of work in many jobs are from 8:00 a.m. to 5:00 p.m., Monday through Friday. This is especially true in office-type work. Other jobs, such as those in farming and construction, may have a workday beginning at 7:00 a.m. and ending at 4:00 p.m., or later. Certain businesses, and industries operate 24 hours each day, seven days per week. In these businesses, three shifts of eight hours each are used. One shift may begin at 7:00 a.m., another at 3:00 p.m., and another at 11:00 p.m. Hours of work vary considerably for self-employed persons, especially those in small businesses and agricultural work.

Several trends affecting the workweek are currently underway. One of these trends involves working forty hours during a four-day period. Ten hours are worked each day. In the suburbs near the larger cities, a number
of retail stores are employing persons to work on the weekend and two other days only. The reason: Retail stores have a much larger volume of business on the weekend than during the week.

Another trend is to reduce the workweek to less than forty hours. Certain industries, especially mining, are moving in this direction. In the not-too-distant future the workweek in some jobs may be reduced to thirty-five hours—five days at seven hours per day.

In general, the trends in length of workweek mentioned here affect persons employed in all except the professional occupations. The length of workweek for professional workers has not been reduced. It appears that it will not be reduced in the near future. In fact, many persons in professional occupations work considerably more than forty hours per week.

**Hazards of Work**

Certain occupations have more risk of physical danger than others, especially those involving the use of powered equipment. Other common hazards include danger of falling, falling obstacles, handling hot materials or chemicals, and exposure to radioactive materials. Employers are increasingly concerned with the safety and welfare of their employees. Laws have been passed to aid in protecting workers from danger. These apply to the wearing of certain clothing, inspection of the area in which the work is performed, installation of protective devices, and other conditions of work. A problem in some industries and in using certain equipment is noise. Sometimes the noise will become so great that the hearing of workers is damaged. Ear plugs or other devices are frequently used. An example of this is work with a ground crew at an air taxi strip where planes land for fuel or cargo. With increased automation and use of powered equipment,
noise is likely to become a greater problem. Currently, various regulations limiting noise are being imposed in an attempt to reduce the danger excessive noise may cause. The general trend is for workers to follow approved safety procedures so that working hazards are reduced.

Environment of Work

Two main areas of the work environment are: (1) social and (2) physical. The social conditions of work refer to the relations of workers with each other. The tendency is for many businesses to become larger with more workers. It is necessary that one be able to work well with other persons. This requires patience, understanding, and a willingness to help the others.

Physical conditions of work include temperature, humidity, dust, and noise. The trend is for inside places of work to be air-conditioned and
humidity-controlled. Dust and fumes are removed from inside work areas by exhaust fans. It is not as easy to control the environment of outside work; neither is it as critical since dust and fumes are usually moved away by the wind. More emphasis is being placed on pollution; therefore, agricultural industries will need to install devices which make exhaust fumes and other by-products harmless. Applicators of agricultural chemicals need to exercise precaution in using toxic chemicals. Workers in chemical plants and retail stores need to understand the dangers of chemicals and the precautions in handling them.

Nature of Work

The nature of work refers to what one actually does at work. Agriculture, both on the farm and off, is becoming more automated. The equipment and machinery being used will become more complicated. This means that workers must have greater knowledge and skill. Workers must also be flexible and willing to adjust to new equipment. Yet, there are routine-type jobs where workers perform the same activities over and over, such as on a food processing assembly line. These kinds of jobs usually require very little training except for a short period of on-the-job training after beginning work.

The trend toward increased automation will replace some of the jobs involving considerable hand labor. More service-producing occupations will arise. The proportion of workers in goods-producing occupations will decline. More persons will work in occupations that "care for people," i.e., health and recreational occupations. In short, the world of work is becoming more "people-oriented."
5. What is the role of labor unions?

Workers often belong to labor unions. Many areas of agriculture have not had unions. However, in recent years efforts have been made to increase the number of agricultural workers in unions, even among farm laborers. Labor unions are the agents, or go-betweens, for workers in dealing with their employers. The purpose of unions is to secure benefits from employers for employees. Members of unions feel that they receive job security and protection through membership. Wage increases and other benefits frequently have come about as the result of union activity. More than 20 million persons now belong to unions in the United States.

The process used in securing benefits is known as "collective bargaining." The right of workers to bargain as a group is protected by law. In order to bargain, the union must be recognized by the employer as the negotiating agent. This is known as "recognition." Items frequently included in bargaining are wages and fringe benefits. Power used by workers to gain demands is in the form of strikes and related pressure tactics. The outcome of bargaining is a "contract" which contains a list of specific agreements. A contract also usually contains a grievance procedure.

Unions were started by tradesman in an attempt to secure improved working conditions. Some of the first groups to unionize were concerned with carpentry, shoemaking, and printing. Today, unions include many different occupations ranging from the unskilled to the professions.
A brief outline of the historical development of labor unions and legislation significant to labor in the United States is shown in Figure 3.

Figure 3. Important Dates in the Development of Unions and Passage of Federal Legislation.

1778 Printers in New York City negotiate an increase in wages.
1791 Carpenters in Philadelphia strike for a 10-hour day and overtime pay.
1834 First attempt to form a national labor federation.
1842 Massachusetts courts hold labor unions legal.
1868 First 8-hour-day law by federal government.
1870 Coal miners and operators establish first written contract.
1874 Cigar makers begin using union label.
1882 Celebration of first Labor Day.
1886 AFL formed.
1916 Child Labor Law enacted.
1931 Davis-Bacon Act passed. (This Act provided for the payment of prevailing wage rates to construction workers on government contract jobs.)
1933 National Industrial Recovery Act endorsed collective negotiations.
1935 CIO formed.
1938 Fair Labor Standards Act passed.
1940-47 Taft-Hartley Act passed to restrain power of unions.
1955 Merger of AFL and CIO.
1962 Executive Order 10988 issued. (This order was by President John F. Kennedy and guaranteed Federal employees the right to join organizations. The right to strike was denied.)
1968 Age Discrimination in Employment Act passed. (This Act was designed to protect older workers from job discrimination.)

1970 Congress passed the Occupational Safety and Health Act (OSHA).

1971-72 Wage and price controls instituted, causing dissension between labor and government (the controls were lifted in 1972).

Many labor unions are now affiliated with the AFL-CIO. This large union was formed by the merger in 1955 of the AFL (American Federation of Labor) and CIO (Congress of Industrial Organizations.) The AFL was founded to further the interests of skilled workers in certain occupations. It limited itself to craft or trade members, such as welders and carpenters. The CIO was founded to represent all workers in an industrial union with membership not related to any specific skill, but including all workers in an industry. Unions not affiliated with the AFL-CIO are known as "independent unions."

Labor unions are organized so that there are local, national or international, and federated unions. Direct membership is held in local unions. Membership is indirect in national and federated unions. Dues are paid for union membership. Part of the dues goes to the local and part to the national unions. Dues may be deducted by the employer from the pay check. This is known as "check-off." Dues may be several dollars each month.

Local unions usually employ a small staff to handle the affairs of the union. A "business agent" is employed as the general manager of the local. If necessary, the business agent may have one or more assistants. Within businesses, "shop stewards" may be elected to observe working practices. In effect, the shop stewards work right along with the other workers but watch for violations of provisions of the contract.
Unions usually represent workers employed at levels less than managerial. Not all businesses have workers who are members of unions. An "open shop" is a business which does not require union membership for beginning or continuing employment. A "closed shop" is a business which employs only union members. Under certain conditions closed shops may hire persons who are not union members, provided membership is sought before beginning work. In some states it is unlawful for a closed shop to exist. A person is not to be denied work on the basis of membership or nonmembership in a union. This is provided by "right to work" laws.

Collective bargaining is not limited just to unions. Some professional organizations recently have become active in bargaining. In addition, some of the unions now include professional workers in their membership.

6. How are persons paid for work?

The practices followed in paying persons for their work vary considerably. Variation is not only found between different occupations but also between employers. The length of pay period varies as well as the bases for payment.

A "pay period" is the length of time from one pay day to another.

Pay periods are usually one week, two weeks, or one month in length. Occa-
sionally it may be one day; that is, workers are paid at the end of each work day. This practice is commonly followed in some unskilled agricultural occupations. Some states have laws which specify that workers in certain jobs must be paid at regular intervals, frequently every two weeks. Pay may be in the form of a warrant, check, or cash. Part of the pay may be in goods or services. An example is when an employer provides free housing for an employee. However, such housing is frequently a fringe benefit.

In general, wages are paid in one of three ways: (1) hourly rate, (2) piece rate, and (3) salary. A combination of any two of these may be used. The earnings of self-employed persons are partially determined by all three.

**Hourly Rate**

Workers may be paid on the basis of the number of hours they work. Normally a worker will work 40 hours per week. In many jobs persons working more than 40 hours are entitled to overtime pay. Overtime pay applies only to the hours worked above 40. The rate of pay for overtime is 1 1/2 times the regular rate per hour. For example, a worker covered by overtime provisions works 50 hours a week. If the regular rate of pay per hour is $3.00, the pay for the week is computed as follows:

- 40 hours @ $3.00 = $120.00
- 10 hours @ $3.00 multiplied by 1 1/2, or $4.50 per hour = 45.00
- Total gross wages for a week = $165.00

Examples of occupations in which the hourly rate may be used are: welder, carpenter, agricultural mechanic, and farm machinery operator.
Piece Rate

The piece rate is based on productivity. It is concerned with how many pieces of a certain item are produced or sold. In sales work the piece rate is known as "commission." For example, the agricultural machinery salesperson may be paid a percentage of the dollar value of the machinery sold.

Beginning workers in businesses that use the piece or commission rate may be started at the minimum wage. After a period of training the basis for pay may be changed to the piece rate. Businesses manufacturing goods prefer the piece rate because it is an incentive for greater production. Farm workers may be paid on the basis of amount harvested, such as with the fruit picker. The more a person produces, the greater his total wages. Workers also like it because it gives them an opportunity to be paid proportionately to the work they perform.

Sales persons working on a commission basis may also receive a fixed salary. An example of such an occupation is the agricultural chemical salesperson, who might receive a small fixed salary in addition to a commission.

Salaries

A salary is a fixed amount of pay regularly received for work. Professional, technical, and managerial workers are frequently paid on a salary basis. This includes a number of agricultural occupations, such as farm managers, agricultural scientists, and inspectors. The nature of the work of certain occupations does not make it possible to pay on an hourly or piece rate. In most salaried occupations no extra pay is received for overtime work.
Figure 4. Agricultural Construction Requires Skilled Workers.
(The above photograph shows an electrician preparing to install an electrical device in an agribusiness facility which is under construction.)

7. What are fringe benefits?

Fringe benefits are the advantages received in addition to normal wages or salaries. They are also known as "fringes," "employee benefits," and "employee services." These additional benefits are provided in order to make certain occupations more attractive to employees and to provide job security. Fringe benefits may also carry responsibilities. It is difficult to place a dollar value on fringe benefits. Benefits vary from one company to another and within occupations. Fringe benefits are often paid
for by employers but in reality are earned by the worker. Many times fringes amount to as much as 20 percent, or more, of the total salary paid. Some of the common benefits are:

Vacations - A vacation may be with or without pay. A paid vacation is one in which the worker continues to draw a salary while on vacation. Length varies from one to three weeks or more each year. Employees must usually work for a while before being eligible for vacations. Unused vacation days may accumulate from one year to another. Policies regarding vacations vary considerably. Sometimes vacation time is known as annual leave.

Sick leave - This permits a worker to continue to draw a salary when unable to work due to illness. The amount of sick leave is usually limited to several days each year. Unused sick leave may accumulate from year to year. Workers should use sick leave only when sick; some employers require workers to be under the care of a physician to be eligible for sick leave. There is a great deal of variation in sick leave policy.

Rest periods - Most employers provide a 10- or 15-minute break twice daily, morning and afternoon. Refreshments may be free or the employee may be required to pay a small cost, depending upon the policy of the company. Rest periods are also known as "coffee breaks."

Lunch hours - Most workers receive a 30-minute to one-hour lunch period. Frequently, workers do not receive pay for the lunch period. Some workers, however, must remain on duty during their lunch hour. A good example is found in many schools where teachers must supervise students while eating and even attempt to instruct in proper eating habits.

Insurance - Group insurance plans are available to many workers. The insurance coverage may be extended to the employee's immediate family (including husband or wife and children). Coverage frequently includes life insurance, accident and sickness insurance, disability benefits, and hospitalization and surgical coverage.

Retirement - These benefits are to reward workers for a number of years of service and to provide income for retired persons. The age at which workers retire varies; however, it is usually age 65. Some employers base
retirement on the number of years of work, usually 20 to 30. Retirement benefits are paid for by both the employee and employer. A worker may increase his retirement benefits by making larger contributions during his working years.

Social Security - Ninety percent of all workers are covered by the Social Security Law, originally passed by Congress in 1935. Each worker is assigned a number known as his Social Security account number. A person's name may change by marriage, adoption, or court order, but the Social Security number remains the same. Social Security is administered by the federal government. The money to finance the program is obtained by a payroll tax levied on workers and their employers.

Additional training and education - Some employers encourage their employees to further their education. Farm and agribusiness managers often encourage their workers to enroll in adult classes. In some cases the employer will pay part or all of the cost of this education. The most common way of obtaining additional education or training is by attending night classes, frequently in a vocational and technical school. This training can also be obtained from correspondence courses. Some companies offer in-service training for their employees. For example, farm machinery manufacturers may conduct schools for workers in local equipment dealerships.

Other common fringe benefits include:

- Profit sharing
- Parking facilities
- Unemployment insurance
- Paid holidays
- Recreation facilities
- Cafeteria service
- Credit unions
- Sabbatical leave
- Travel allowances
- Social functions
- Bonus payments
8. What laws apply to work?

Laws and regulations have been established to protect workers and their employers. Such laws help to improve the conditions of work. The laws and regulations relating to work have been established by federal, state, and local governments.

Federal Laws and Regulations

Several federal laws apply to workers. The most important one is the Fair Labor Standards Act. This law was originally enacted in 1938. Since enactment it has been amended several times.

The Fair Labor Standards Act applies equally to men and women. Workers in factories, offices, and homes are covered. However, some agricultural occupations are not included. It applies to all sizes of businesses. Both full- and part-time workers are covered. Five major areas in the act are: (1) minimum wage, (2) maximum hours, (3) overtime pay, (4) equal pay, and (5) child labor standards.

1. Minimum wage - This provision specifies the minimum wages that can be paid. The minimum for certain agricultural work may be less than that for other work. This means that it is possible to pay certain types of workers, especially those on farms, at a lower rate.

2. Maximum hours - The maximum hours provision is concerned with overtime. A normal work week is 40 hours. Workers in many agricultural occupations work more than 40 hours a week.

3. Overtime pay - Workers in certain jobs who work more than 40 hours per week must be paid 1 1/2 times the regular rate of pay for all hours over 40. Certain agricultural work is exempt from overtime provisions.

4. Equal pay - All workers are to be paid at the same rate for the same work. Employers cannot discriminate on the basis of sex of workers. Different rates of pay may be used if the difference is based on seniority, merit, or production. This provision is applicable to all workers subject to minimum wage provisions.
5. Child labor standards - The minimum age for employment in most occupations is sixteen years. This includes agricultural work during school hours or any agricultural occupation declared to be hazardous. A minimum age of 18 is applied to hazardous nonagricultural occupations. Persons who are a minimum of 14 years of age may work outside of school hours in certain nonmanufacturing and nonmining occupations. The Secretary of Labor determines which occupations are hazardous. The child labor provisions do not apply to persons under age 16 employed by their parents in agricultural or in nonmanufacturing and nonmining occupations. Certain exceptions are made in this provision for youth enrolled in selected vocational education courses.

Several other federal laws applicable to workers are the Federal Wage Garnishment Law, the Age Discrimination in Employment Act, the Civil Rights Act of 1964, and the Occupational Safety and Health Act.

1. The Federal Wage Garnishment Law became effective July 1, 1970. This law limits the amount of earnings of an employee which is subject to garnishment. It also protects a worker from dismissal because of garnishment for any one indebtedness. "Garnishment" refers to a legal procedure for withholding money from a pay check to pay a debt. Not more than 25 percent of the disposable weekly earnings may be withheld. "Disposable earnings" refers to the amount remaining after income tax, social security, and the like, have been deducted.

2. The Age Discrimination in Employment Act is designed to protect workers between the ages of 40 and 65 years. It applies to employers with 25 or more workers and employment agencies serving these employers and unions. Only the businesses involved in some way in interstate commerce are covered. This Act was passed in 1967.

3. The Civil Rights Act of 1964 contains a provision prohibiting racial discrimination by all businesses receiving federal financial assistance. Title VI of the Act states that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program of activity receiving federal financial assistance." Since many businesses and industries receive federal funds in some way, the effects of this Act are far reaching.
4. The Occupational Safety and Health Act, enacted in 1970, provides a comprehensive guide to occupational safety and health. The purpose of the law is to assure a safe and healthful work environment for all persons. Employers must often provide specific safety equipment, such as hard hats on construction sites.

Additional information concerning federal laws and regulations may be obtained from the U. S. Department of Labor. Regional and field offices of the Wage and Hour and Public Contracts Divisions are located in a number of cities.

State and Local Laws and Regulations

State and local laws and regulations may vary considerably from one state to another. Some of the areas most commonly included are listed below.

1. Licensing regulations - Certain workers must be licensed or bonded. This is to ensure the quality of the work rendered by these workers. Examples of workers who are licensed include barbers, physicians, and teachers.

2. Denial or abridgement of work - In some states the right of a person to work shall not be denied or abridged on account of membership or nonmembership in any labor union or labor organization. These are known as "right to work" laws.

3. Officers of labor unions - Aliens, communists, or persons convicted of certain crimes are prohibited from holding offices in labor organizations or participating in labor-management functions in some states.

4. Work of children - A number of states have laws restricting the work of persons under a certain age. Frequently, these regulations apply to boys and girls under the age of 14 or 16. The restrictions apply to certain kinds of work in mills, canneries, workshops, and factories.

5. Hours of work - States frequently have laws relating to the hours of work. These laws usually have special application to persons of certain ages. Persons of certain ages may not be allowed to work during certain hours, usually between 7:00 p.m. and 6:00 a.m.
6. When to pay certain employees - Some states require businesses engaged in certain manufacturing and other work to pay their employees at regular and designated intervals. This is frequently every two weeks or twice during each calendar month. The pay dates frequently used are the second and fourth Saturday.

7. Discounting checks - A number of states have laws which specify that the full amount of a trade check issued in payment for labor shall be paid to an employee. No discounts are permitted when the check is exchanged for cash.

Additional information on state laws and regulations is available from state-operated employment services and commissions, such as the Virginia Employment Commission.

9. Which areas of work have the best future?

The demand for workers in various jobs changes. A number of factors cause these changes. Prominent causes of change in the past have been economic conditions and war. During times when many workers are being laid off, the demand for products which are not necessities may decline. Likewise, in times of full employment there will be greater demand for so-called luxury items. Wars require weapons, airplanes, ships, and other materials. This means that a large number of workers will be needed to manufacture these materials.

Another cause of change in demand for workers is improved technology. Some occupations gradually go out of existence, such as the blacksmith. Other occupations arise, often to replace the occupations which disappear. The kinds of work performed by blacksmiths has expanded and resulted in a number of new occupations, usually filled by specialists.
Actually, machinists and welders perform many of the functions previously done by blacksmiths. As older occupations gradually go out of existence, new occupations emerge. It is usually easier to advance in an emerging occupation than in older occupations which are declining.

The greatest growth in jobs in the next few years is expected to occur in the so-called "white collar" jobs. These include professional, clerical, managerial, and sales jobs. The growth in number of "blue-collar" jobs is not expected to be as large. However, this does not mean that good opportunities will not exist for craftsmen, operators, and laborers. The number in service kinds of work will increase as will employment by various levels of government. Recreational industries are expected to grow considerably in the years ahead. Currently, much emphasis is being placed on energy conservation, pollution, ecology, and other environmental concerns. It is likely that occupational opportunities will probably grow rapidly in these areas.

The number of workers on farms is expected to continue to decline, but at a slower rate than in past years. Another trend is that workers on the farms will be required to have training and higher levels of education. Increases in farm output will necessitate steady increases in employment in some areas of agricultural services and industries, such as farm supplies and agricultural machinery.

Workers are needed as replacements. Older workers retire and die, making room for younger workers to enter and advance in an occupation. The amount of formal education necessary to replace a retiring worker has increased and is continuing to increase.
In addition to the future of a particular job, consideration should also be given to how well one is able to advance to other jobs. Some jobs are said to be "dead-end." That is, they do not lead anywhere. Dead-end jobs are important in the world of work but usually do not provide opportunities for advancement. Some jobs are said to be "status quo." In these, opportunities are available, but the potential for growth is limited. Other jobs are said to have a bright future. These are the jobs which will provide the greatest opportunity for advancement and progress.

Figure 5. View of the Milking Area on a Modern Dairy Farm. In areas where dairy farming is conducted, establishing and owning one is a definite possibility. However, the problems in securing land, facilities, and finances must be overcome. (Photograph courtesy Butler Manufacturing Company, Kansas City, Missouri)
10. What is the possibility of owning your own business?

Many people in the United States own their own businesses. Some own them singly, others in partnerships, and others own a share of a corporation.

Different kinds of single-owner businesses are found. Some of these are large and some are small. Businesses usually begin small. If successful, they may grow into large businesses requiring considerable managerial talent. Examples of businesses frequently owned by one person are drugstores, medical clinics, grocery stores, flower shops, and restaurants.

The trend in recent years has been for businesses to grow larger in size and smaller in number. For example, many small independently-owned farm supply stores have disappeared. These have been replaced by larger stores owned by corporations or cooperatives. This has occurred because of a number of reasons. Larger stores sell more goods. In turn, because of large quantities of goods bought to sell, they are able to buy from producers at reduced prices. The reduced prices are passed on as savings to shoppers. Small stores are frequently unable to compete in price.

This is not to say that an individual cannot successfully operate a business of his own. He can. But, he must realize that it is difficult to compete in price with big businesses. To be successful, a small business must offer quality merchandise at a reasonable price along with good service. Personal interest and friendliness with customers also help small businesses to be successful.
A popular way of owning a business is to obtain a franchise from a large company. An individual owns the business and yet has the advertising and promotional benefits of the larger company. Also, the larger company may serve as the supplier of the products to be sold or produced. Examples of such businesses are farm machinery dealers, gasoline stations, and drive-in grocery stores.

Instead of owning a business, many persons own stock. An owner of stock owns a share of the business. The returns one receives on the stock are proportionate to (1) the amount of stock owned and (2) the percentage of dividends paid. Stockholders receive dividends only if a profit is made and the board of directors authorizes the payment of a dividend.

A common method of conducting business in agriculture is with cooperatives. A cooperative is a business which is owned and controlled by members who have specific needs. Farmer cooperatives are established to make farm supplies or services available to farmers and to market farm products. The profit of cooperatives is returned to the members in the form of patronage refunds. Cooperatives provide jobs for many persons who are interested in agriculture.

**Summary**

The nature of the work in agriculture has changed considerably. Today, many agricultural jobs are found off the farm. In effect, agribusiness has resulted from the removal of traditional farm functions from the farm. Farmers of the past made their own tools and processed their own products. This is not the case today in commercial agriculture. Farmers depend upon machinery manufacturers for equipment,
farm supply manufacturers for fertilizer and other chemicals, and
many other sources for the inputs needed in farming.

A wide range of agricultural jobs exists. These jobs may be
with private business or government agencies. The level of work may
range from unskilled to the top level management. The conditions of
work in many agricultural jobs are similar to those of other jobs.
Yet, certain agricultural jobs tend to be seasonal and require long
hours during the peak season.

Questions to Discuss

1. How has work changed?

2. How has where people live been affected by work?

3. What is technology? How has it affected work?

4. How do public and private agencies differ?

5. What levels of work are found in businesses? How do the levels differ?

6. What is meant by "hours of work?" How do hours of work vary?

7. What is "collective bargaining?" What is the role of unions in
collective bargaining?

8. What are the differences in pay by the hourly rate, piece rate,
and salary?

9. What are the major provisions of the Fair Labor Standards Act?

Activities to Perform

1. Arrange to talk to one or more of the following persons:

   A representative of a local labor union - Discuss the
   activities of labor unions in the area where you live,
especially as related to agricultural occupations.

   A representative of the Social Security Office - Discuss
   what Social Security is and does.
A representative of a local agribusiness or industry - Discuss levels of employment in that particular industry.

A representative of a government agricultural agency - Discuss job opportunities for persons interested in agriculture with the government.

A representative of the local state employment service - Discuss wage payment practices and the trends in occupations. Determine which occupations are most promising and least promising where you live.

An owner of a small business, preferably one concerned with agriculture - Discuss some of the experiences and problems encountered by owners of businesses.

2. Select one of the items listed below and learn how it was developed. Prepare a poster or write a paper which outlines your findings.

   Electricity  Typewriter
   Reaper       Laser beam
   Steel plow   Gasoline
   Telephone    Milking machine
   Sewing machine Hybrid corn
   Cotton gin   Or any other invention which interests you

3. Prepare a report which explains the following methods of business ownership. Make a survey of the businesses in your community to determine the number of each kind present.

   Sole (or individual ownership)  Partnership
   Corporation  Cooperative

4. Establish a fictitious partnership, corporation, or cooperative to manufacture an agricultural supply or process an agricultural product. Investigate the legal aspects and functioning of the particular kind of business to be formed. The procedure for establishing the business should be outlined in a written report.

5. Develop a report which describes how transportation, i.e., the motortruck, has changed where people in agriculture work and what they do at work.

6. Interview persons employed in different levels of agricultural work. Inquire as to how each level relates to the others. Determine how advancement occurs.

7. Develop a list of persons who live in your community and work in agricultural occupations.

8. Develop a report which describes how the average worker's kind of work has changed in your community. Start your report at a time prior to 1800.
9. Determine how the use of land within one mile of your home has changed in the last five years. This may be done by talking to parents and friends or by making a brief tour of the area and noting buildings and other features which appear new.

10. Make a list of new businesses that have opened in your local area in the last year. Determine the kinds of jobs found in them. Specifically note those which are agricultural in nature.

References


