

# Insurance against losses on farms.

Insurance does not prevent loss. It spreads the losses of a few among many. By paying a small, definite amount annually, a person gets assurance that his burden of possible losses may be distributed over a period of years. Insurance can help stabilize farm income by assuring that even in the event of a disaster a farmer will have some cash to meet his obligations. By *Ralph R. Botts* and *Robert C. Otte*, agricultural economists, Farm Economics Research Division.

ALL INSURANCE companies try to follow certain common principles.

They must establish premium rates for each class and degree of risk. Enough risks must be carried to give a reasonably stable experience. The company must be safeguarded against adverse selection and too great a concentration of risks.

Premiums must equal or exceed losses within relatively short periods of time. Aggregate losses must not vary too greatly from year to year, or impractically large reserves will be required. Losses must occur by chance, for otherwise there would be no basis for averaging.

We discuss here only the forms of insurance that cover loss of farm property (including buildings and their contents) and farm products, before and after harvest and while still on the farm. Other forms of insurance may be important, however, to farmers and others—automobile, life, health and sickness, employer's liability, workman's compensation, old age and survivorship (social security), and other forms of property, personal, and liability insurance.

FIRE AND WINDSTORM insurance is needed by farmers more than by any other group.

Farm buildings seldom are of fire-

proof construction. Firefighting facilities often are far away, and a fire may bring total loss.

Farm buildings also are more apt to be damaged or demolished by wind than other buildings because of their construction and the higher, unobstructed wind velocities to which they are subjected.

Loss of the farm buildings means loss of a place to live for the farm family and impairment of its means of livelihood.

Both stock and mutual insurance companies offer fire and lightning and windstorm insurance on farm buildings and personal property, such as machinery and household equipment.

Mutual companies include the farm mutuals, which have at least one-half of their insurance on farm property, and the general-writing mutuals.

Within a given State, the stock and general-writing mutual companies ordinarily use the same rate manuals covering farm property. The mutuals, however, usually declare dividends (about 20 percent) when policies are renewed.

The stock and general-writing mutual companies offer term policies and 1-year policies. The premium for a 3-year policy is 2.7 times the annual premium; for a 5-year policy, it is 4.4 times the annual premium. An ex-

ample: If the premium for an annual policy is 10 dollars, a 3-year policy would cost 27 dollars and a 5-year policy would cost 44 dollars. For a general-writing mutual company that has a 20-percent dividend rate, the renewal premium at the end of 3 years would be 21.60 dollars, instead of 27 dollars; for a 5-year policy, the renewal premium would be 35.20 dollars, instead of 44.

Rates of the stock and the general-writing mutuals vary according to loss probabilities associated with a number of factors. The use (dwelling or barn), wall construction, roof flammability, and location and the presence or absence of lightning rods, a central heating plant, and sometimes fire extinguishers all affect rates. Another factor is the availability of fire-department services—whether the fire department is within a specified distance from the farm, there is telephone service, and at least 3 thousand gallons of water are available for the use of a fire truck.

Farm mutual companies other than the crop-hail mutuals may be classified as specialized fire (and lightning) companies, which do not cover the windstorm peril; the fire-wind mutuals, which cover wind and hail damage to property other than growing crops, in addition to fire and lightning; and the specialized wind mutuals, which usually cover only wind and hail damage (to property other than growing crops).

Most of the fire-wind mutual companies also cover property damage from such minor perils as vehicles, explosion, riot, smoke, falling aircraft, and, less often, overturn of machinery. A few may cover theft of machinery or livestock, or both, and loss of livestock on highways. Some of the specialized fire and specialized wind mutuals cover these additional perils.

Hereafter, we shall call the specialized fire and the fire-wind companies farm fire mutuals, because both types of companies write fire (and lightning) insurance and have at least half of it on farm property.

Many of the farm fire mutuals were organized as assessment cooperatives in the 1870's and 1880's. They operated in limited areas and made assessments after losses were incurred. They insured mainly against damage to buildings by fire and lightning. There was little uniformity in the wording of policies. Livestock was the chief source of power on farms, and there was little investment in or insurance on equipment. Because values were low, the amounts of insurance provided were low.

Significant changes have occurred, particularly as to volume of insurance carried, services performed, and financial soundness of the farm fire mutuals. There are fewer companies, but they have increased greatly their volume of business. The proportion of companies carrying at least 10 million dollars of insurance trebled between 1936 and 1954. The increase came partly from the acceptance of nonfarm risks and partly from the rise in value of farm property, including machinery.

Other changes include the coverage of additional perils, including windstorm, a greater accumulation of safety funds or reserves, and wider adoption of the practices of collecting advance assessments and using standardized policies.

The 1,743 farm fire mutuals on December 31, 1954, had 28.8 billion dollars of fire (and lightning) insurance in force, of which about 85 percent was on farm property. That was about 5.5 times the volume of fire insurance carried by these companies 40 years earlier. About 11.4 billion dollars of the 28.8 billion dollars of insurance also applied to the windstorm peril. In addition, 64 specialized windstorm mutuals carried another 7.7 billion dollars of windstorm insurance, making a total of 19.1 billion dollars of such insurance in force at the end of 1954.

The Corn Belt and Lake States have a greater concentration of farm mutuals than any other region. Seventy-one percent of the farm fire mutuals

were located there. They carried about 64 percent of the total farm mutual fire insurance in force at the end of 1954. Moreover, 83 percent of the specialized windstorm mutuals, which carried 96 percent of the insurance on the books of such companies, also were in this region.

About one in three farm fire mutuals were covering the windstorm peril in one form or another in 1954. Only one in five did so in 1946.

As more farm fire mutuals make windstorm insurance available to members, more and more specialized windstorm mutuals add fire and related perils to their coverages. Eventually there may be only one type of farm mutual—the wind-writing fire mutual. The inclusion of both perils and others in one policy should result in some savings in overall operating expenses.

Many farm mutuals include in their policies a provision for the payment of up to 10 percent of the amount of insurance on household goods and personal property if they are damaged or destroyed when off the policyholder's premises. For example, with 2 thousand dollars of insurance on personal property, a policyholder may claim up to 200 dollars for clothing damaged by fire while it is in storage or at a dry-cleaning establishment or laundry in a nearby town.

About two-thirds of the farm companies, including specialized windstorm and fire mutuals, use 5-year policies. These companies usually make assessment levies annually, however, to pay losses and operating expenses and to build up safety funds.

About three-fourths of the fire mutuals and three-fifths of the specialized wind mutuals charge flat rates that are applicable to all classes of farm property. They do not classify rates according to fire-loss or wind-loss probabilities. These rates vary widely, even as State averages, but they tend to be lowest in the Great Plains, Lake, and Corn Belt States and highest in the Northeastern, Appalachian, Delta, and

Southeastern States. In Minnesota, for example, they averaged 15.5 cents per 100 dollars in 1954, compared with 75.1 cents in South Carolina.

One reason for these low loss and assessment rates of the farm fire mutuals is their practice of inspecting properties before acceptance for insurance. About nine in ten follow this practice. About two-thirds of them also inspect properties both upon acceptance and when policies are renewed. Only about one in ten companies also inspect properties during policy terms.

Most farm mutuals now have safety funds or reserves and about seven in ten use reinsurance. Reinsurance is a transfer of part of the ultimate liability for loss from one company to another. It enables a company to insure high-valued farm properties more adequately and also to iron out the year-to-year fluctuations in the cost of insurance to members.

In all forms of property insurance, the company may pay the claim at either the actual value of the property or the amount necessary to repair or replace it, taking depreciation into account. Any payment, however, is limited to the amount stated in the policy. Partial losses thus are payable in full unless a deductible amount applies.

Most losses from windstorms are small. For example, old roofs or barn doors that already need repairs may be damaged. Some companies therefore include in their policies deductible clauses, under which the amount specified is deducted from all windstorm claims. This may also be offered on an optional basis along with a full-coverage policy. Under a 50-dollar-deductible clause, for example, that amount would be deducted from a claim of 75 dollars, and the insurance would pay only 25 dollars. Nothing would be payable on a claim of 50 dollars or less.

Deductible clauses mean lower premiums. A farmer who keeps his buildings in good shape is likely to favor this kind of insurance, as it does not

require him to help pay the maintenance claims of his neighbors. A major loss, which would hurt him most would still be covered almost in full.

If a farmer has obtained a loan from the Commodity Credit Corporation on farm-stored grain, he is not responsible for the loss of such grain if there has been no negligence on his part. The Commodity Credit Corporation will assume any loss of sealed grain from causes such as fire or windstorm but not losses from insect infestation, vermin, or rodents. If insurance covered such grain and there were a loss, probably the farmer could not collect from his insurance company. He would have suffered no financial loss. As far as he is concerned, the provision in the loan agreement serves as a substitute for insurance on sealed grain.

ALL-RISK FEDERAL CROP insurance was available on one or more crops in 818 counties in 1957. More than 330 thousand producers were insured. Wheat, cotton, flax, corn, tobacco, soybeans, barley, oats, dry edible beans, peaches, and citrus fruit, sometimes were insured under separate contracts. Many different kinds of crops also were covered in some places under multiple-crop insurance. In all, 23 different crops were insured in one or more counties in 1957.

This insurance covers the unavoidable natural causes of loss, including drought, flood, hail, wind, frost, winterkill, lightning, fire, excessive rain, snow, hurricane, tornado, wild animals, insects, and plant diseases and such other unavoidable causes as may be determined by the Federal Crop Insurance Corporation, which makes the insurance available. Drought has been the commonest cause of losses.

This coverage is essentially a guarantee. (Citrus fruit is an exception.) The insurance cannot exceed area-average costs of production, which are often considered to be 60 percent of the county or area-average, long-term yield. The coverage is progressive. It builds up by stages as the crop ma-

tures—somewhat in line with the increase in investment as additional production costs are incurred. The maximum coverage applies to a crop that is harvested.

The grower is indemnified for the difference between his coverage and the bushels (or other units) he produces. Any deficit in production is valued at a predetermined price per unit. If there is a loss of quality, the actual production is valued at a lower price while the coverage is valued at the predetermined price. This program insures yield and quality but not price and income.

Under multiple-crop insurance, the coverage in yield units for each crop is converted to dollars by using the designated price. These dollar coverages are then combined. The production of each crop later is converted to dollars in the same way. The difference between the combined coverage and the combined valuation is the amount of the indemnity.

Combining several crops under one coverage reduces risks. Each crop is subject in part to different risks, and good production of one often offsets poor production of another. The farmer receives a premium reduction for this diversification of risk.

Under another plan, several crops may be covered under one contract, with the option that losses are still settled separately on each crop. Rate discounts for diversification do not apply as under the other plan.

Under Federal crop insurance, all farmers in a given area, which may be as large as a county, have the same coverage and pay the same premium rate. Coverages and rates are on file in the county offices. Insurance must be obtained before specified closing dates. A policy is continuous, but failure to pay premiums before a specified date automatically terminates the contract. Premiums do not include the expense of operating the program; that is borne by the Federal Government.

A farmer cannot buy Federal crop insurance to cover certain fields, as he

can in the case of crop-hail insurance. He must insure all he has in the county or none. Settlements by fields result in the payment of some losses that would be avoided on an overall basis, and the latter more nearly measures the loss to the farmer. High production on one field may offset low production on another. This balancing of high against low production is more likely to occur with large acreages and widely separated tracts than with smaller acreages and contiguous tracts.

Federal crop insurance is essentially an all-risk yield guarantec, but this is not quite true of citrus (not tree) insurance. Citrus contracts cover the principal hazards of freeze and windstorm, and one minor hazard, hail. The policy is a multiple-peril, not an all-risk, contract. Moreover, losses are settled on a percentage of damage, rather than a deficit-yield, basis.

Peach (not tree) insurance was offered experimentally in 1957 in one county. Growers can elect coverage at 100, 150, or 200 dollars an acre. A normal yield per acre is established for each insured orchard. When production drops below the coverage in bushels (dollar coverage divided by fixed price per bushel), the grower moves into the loss category. But he bears the first 40 percentage points of the percentage of damage. A deductible clause of this kind holds down losses and premium costs.

As an example of the peach insurance, suppose a normal yield of 400 bushels were established for a particular orchard. If the farmer elects 200 dollars of coverage, his effective guarantec is only 60 percent of that figure, or 120 dollars an acre—because of the deductible feature. The 200-dollar coverage divided by the 400 bushels of normal yield provides a fixed price (50 cents), at which any production is valued. If only 100 bushels are produced, they are valued at 50 dollars (or 50 cents a bushel), and the indemnity is 70 dollars (120 dollars minus 50 dollars).

For all crops except tobacco, Federal

crop insurance terminates when the crop leaves the field. Tobacco losses cannot be determined until the insured tobacco has been weighed and sold at the auction market and the average market price has been determined. The insurance therefore also covers tobacco while it is in the curing barn.

MULTIPLE-PERIL CROP insurance was offered for the first time in 1956 in seven States by about 60 stock insurance companies.

A few companies attempted to write all-risk crop insurance many years ago, but the projects were not successful.

The contracts were written against loss of income from the crop by any cause, and price declines were more important causes of loss than crop failures. The insurance of price would be desirable if it were feasible, but prices are determined largely by human actions and are not predictable.

Factors that affect production are largely physical and can be predicted in some measure. Also, because price declines in a given year affect most producers, the spreading of risks becomes almost impossible.

The 1956 multiple-peril crop insurance program got started late, and fewer than 100 policies were sold. These policies covered the perils of drought, plant disease, insect infestation, freezing, windstorm, flood, excessive moisture, excessive heat, and some minor hazards. The insurance was available on corn and soybeans in specified counties in Illinois, Indiana, Iowa, Minnesota, and Nebraska and on tobacco in Kentucky and Tennessee.

The insurance was offered as a supplement to crop-hail insurance. A normal yield was established for each insurable crop for each area. A farmer could get crop-hail insurance for half that figure, valued at a fixed price per bushel. In an 80-bushel area, for example, a farmer could get crop-hail insurance on corn for up to 100 dollars an acre (or 40 bushels times 2.50 dollars a bushel).

In most areas, 30 percent of the hail insurance was applicable as crop insurance (30 dollars, for example). If, because of the occurrence of a named peril, only 30 bushels were produced, they were valued at 75 cents each, or 22.50 dollars, and the indemnity amounted to 7.50 dollars an acre (or 30 dollars minus 22.50). Stated in another way, the guarantee under crop insurance was equivalent to placing a valuation of 30 percent of the fixed price on each bushel of deficit yield below half of normal for the area.

CROP-HAIL insurance is used by more and more farmers as protection against financial loss because of hail damage to growing crops. Much of the increase in this insurance has been on corn and soybeans in the Midwest and on tobacco and cotton in the Southeast.

About 55 mutual and 85 stock companies offer crop-hail insurance. It is also available in three States (North Dakota, Colorado, and Montana) from State hail departments.

From 42 to 93 percent of the premiums paid by farmers were returned to them as indemnities in 1950-1956. Losses were particularly high in 1956.

Claims are based on the percentage of damage as determined by inspection. A farmer having 1 thousand dollars of insurance and 40-percent damage is paid 400 dollars. He can obtain lower rates by taking out a deductible policy. In this example, under a 10-percent deductible clause, the farmer would receive only 300 dollars, but his premium would be lower.

The policy shows the total amount of hail insurance on a crop and also a per-acre figure. The farmer may claim a loss on any part of the insured acreage. Buying insurance late in the season does not reduce the premium, because the probability of loss increases as harvesttime approaches.

The insurance may be taken on a general or a deductible policy.

General policies usually contain minimum-loss clauses under which no loss of less than a specified percentage is

payable. Losses that equal or exceed this minimum amount are payable in full. Under a 5-percent minimum-loss clause, for example, nothing would be payable on hail damage of 4 percent or less; but if the loss amounted to 5 percent or more, that percentage of the insurance on the damaged acres would be payable. This eliminates small claims, for which settlement costs are high in proportion to the indemnities paid.

Deductible policies are particularly well adapted to areas in which hail risk and premiums are high. The deductible may be as low as 10 percent or as high as 25 percent.

Farmers tend to take hail insurance when their crop prospects are good. Before taking it, the farmer should consider the alternative protection provided by different policies in relation to needs and costs. Suppose a crop starts off well and gives promise of bringing in 2 thousand dollars. Suppose, further, that the premium rate under a general hail insurance policy is 10 percent (or 200 dollars). The farmer may decide to carry part of the risk himself and spend only 120 dollars for insurance. This would buy 1,200 dollars on a general policy, or enough to carry 60 percent of the value. The same premium (120 dollars) might buy a 10-percent deductible policy for 1,500 dollars or a 25-percent deductible policy for 2 thousand dollars.

If a loss of less than 50 percent occurs, the largest indemnity would be paid under the general policy. The 10-percent deductible policy provides the greater protection against losses between 50 and 70 percent. The 25-percent deductible policy is most valuable for protection against losses of more than 70 percent.

Deductible crop-hail insurance can be used in combination with all-risk crop insurance. The latter covers loss from any cause (including hail) but is limited to area-average costs of production. There would thus be some duplication with a general crop-hail policy, which covers cost of produc-

tion as well as possible net income.

Less duplication occurs when crop prospects are good than when they are poor, and the amount of duplication may be reduced by using a deductible clause on the crop-hail policy.

Standing grain and soybeans are insured against fire (and lightning) loss by some stock and mutual companies, particularly in the Northwest. Insured fields must be specifically described. Companies in some States make the insurance available as a supplement to crop-hail insurance. The fire insurance applies to all fields covered by crop-hail insurance. The two coverages expire at the same time.

LIVESTOCK insurance against death from fire (and lightning), windstorm, and related perils may be obtained from most stock and mutual insurance companies. Lightning is the commonest cause of loss.

A farmer may obtain a different amount of insurance on each specifically described (usually high-valued) animal; or he may insure all animals of a kind, as personal property, for a blanket amount. In the latter case, a specified maximum amount of insurance usually applies to any one animal.

Many companies, including more than a third of the farm companies, also use a pro rata clause in settling livestock losses that occur in connection with blanket or herd coverage. The amount of insurance on the herd or class of animals is prorated over the number of head owned at the time of loss. With such a clause in effect, the company is liable for the least of three amounts with respect to an animal: The prorated amount, the specified maximum, or the actual value of the animal.

All-risk mortality insurance on livestock, covering accidents and disease, as well as other perils, is uncommon, although it was widely available in the 1920's. One large company now writes all-risk livestock insurance on horses and cattle only—not range cattle. All insured animals must be kept under

daily supervision and care. Indemnification is made only upon the death of the animal. Other companies offer all-risk insurance on show animals, breeding stock, and racehorses. A few make it available on the livestock of 4-H Club members and Future Farmers of America or as coverage on animals while in transit.

A comparison of the policies of two companies, A and B, will indicate the range in all-risk livestock coverages now available from a few companies. Both cover range cattle as well as show animals and racehorses. The insurance also covers transit losses. Rates are higher for animals less than about 3 months old and animals more than 7 or 8 years old.

Coverage on specifically described young cattle increases automatically by 10 percent of the original coverage per month—for 5 months in the case of company A, and for 12 months in the case of company B. Coverages of both companies during the fifth month are 140 percent of the original coverage. But the coverage of company A remains at 140 percent, while the coverage of company B during the 12th month has increased to 210 percent of the original amount of insurance. For company A, the premium is 4.9 percent of the average coverage for the year; for company B, it is 5.8 percent.

Insurance on specifically described mature animals, under which the coverage remains constant, may be obtained from either company. For dairy or beef cattle, company A charges a premium equal to 5.5 percent of the insurance, and company B charges 6 percent.

Both companies offer herd insurance on cattle. Not fewer than 10 animals may be insured. The policy of company A will pay not more than one-fourth of the insurance for any one animal. The maximum for company B is 50 percent for one animal. The premium is 3 percent of the insurance. Claims are subject to a deductible equal to the amount of the premium.

Forest fire (and lightning) insurance

is available in Southern States from at least two companies. Young planted stands and merchantable timber may be insured. Such insurance makes loans on standing timber more readily available at lower interest rates and encourages the replanting of trees in areas devastated by fire. The company prefers large holdings that are in the care of qualified foresters, although they will consider applications from owners of small tracts.

The basic rate in one Southern State is 56 cents per 100 dollars of insurance—subject to certain debits and credits.

Credits, or reductions from the basic rate, of 15 percent are given for forest protection; 5 percent for a tree size of 12 inches or more in diameter, breast high; 5 percent for fire-resistant species; 2 percent for heavy density of growth; and 2 percent for light underbrush.

Debits, or additions to the base rate, are as follows: Lightning, 2 percent; naval stores, 20 percent; railroads, 5 percent; recreation, 10 percent; paved State roads, 5 percent; no fire protection, 50 percent; tree size of 0–5 inches at breast height, 50 percent; steep terrain, 10 percent; heavy underbrush, 10 percent; and other recognizable hazards, 5 to 100 percent.

The premium rate includes a charge equal to 80 percent of the annual premium for the additional hazard incurred from February through June.

Under this plan, the insurance coverage on young trees increases by 4 dollars an acre for each additional year of age of trees up to about 20 years of age. For example, coverage on 2- to 3-year-old trees might be 4 dollars an acre; age 3 to 4, 8 dollars; and 15 to 16 years, 56 dollars.

FLOOD INSURANCE for most types of farm property generally has been unavailable. (All-risk Federal crop insurance, multiple-peril crop insurance, and some types of livestock insurance are limited exceptions.)

Private insurance companies have

had little success in this field. A company organized to sell flood insurance at St. Louis, Cairo, and New Orleans after floods in 1895 and 1896 was ruined financially by a flood in 1899.

Several factors have prevented the successful operation of flood insurance. The necessary information about frequency of flooding and resulting losses is not available for many areas. Because losses are limited to flood plains, only persons who have a high probability of loss would take the insurance, and consequently the premiums would be high.

The chief stumbling block, however, is the need for huge reserves. William G. Hoyt and Walter B. Langbein, in their section on insurance in volume 3 of the Hoover Commission's Task Force Report on Water Resources and Power, June 1955, estimated that reserves for a nationwide flood-insurance program, based on a 25-year average, would have had to be 7 times the average annual loss. The necessary ratio of reserves to average annual loss would be even greater for smaller areas. Based on the same 25-year period, the Ohio Valley would have required reserves 14.5 times the average annual loss.

A company may be faced with a high-loss year before it can accumulate the necessary reserves. Because it may take a long time for premiums and losses to average out, flood insurance is not attractive as a business undertaking.

The Federal Government, however, can take a longer view. The American public is already investing large sums each year in flood-control and disaster-relief programs, both Government and private. Flood insurance, along with flood forecasting, zoning, and other adjustments in the use of flood plains, can be used both as a complement to and a substitute for flood-control structures. The only alternative in many areas is to live with the river. Flood insurance can make it easier to do that.

The Congress in 1956 provided for

an experimental program of flood insurance (Public Law 1016), under which real and personal property, both farm and urban (including property of State and local governments), could be insured against damage from flooding. The law provided for insurance in amounts up to 10 thousand dollars on dwellings and up to 250 thousand dollars on commercial property. Sixty percent of the "estimated" (actuarial) rates were payable by the insured persons; the other 40 percent was to be subsidized by the Federal Government. The law provided that after July 1, 1958, insurance could be offered only in areas where flood-zoning restrictions had been adopted and that half of the Federal subsidy must be borne by the States after July 1, 1959.

The program was to be operated on an experimental basis for 5 years. Considerable progress was made in 1956 and 1957 in planning and making tentative arrangements. The 85th Congress (1st session) did not appropriate funds, however, and the program became inoperative.

The planned program provided that for each claim there would be a deductible equal to the first 500 dollars plus 5 percent of the remaining loss. Policies for dwellings could be obtained with 80 percent coinsurance or no coinsurance requirement. Policies for commercial property could be obtained with 80 percent, 50 percent, or no coinsurance provisions. (Coinsurance means that any payment for loss will be reduced if the policyholder fails to have his property insured for the specified percentage of its value.)

Six zones, which included 14 river basins, were established. Base rates before deducting the subsidy ranged from 2 to 3.75 dollars per 100 dollars of insurance for 80-percent coinsurance, depending upon the zone. These rates were for either buildings and contents or contents alone and for construction of brick or stone. Policies were contemplated for buildings alone at 75 percent of these rates. Frame construction added 10 percent to the

base rate. Rates on contents were reduced by one-third if they were kept above the first floor of the building. After the subsidy, the policyholder paid only 60 percent of the gross rates.

Under the planned program, premiums would have been doubled for property built over water. A surcharge of 10 percent was to be added for counties bordering on the Atlantic coast from Maine to the Virginia Capes. From the Capes south around Florida and the Gulf of Mexico, 20 percent would have been added in coastal counties. Rates for policies with no coinsurance provision would have been 3 times those for 80-percent coinsurance.

If a building, excluding contents, of frame construction were insured "flat"—with no coinsurance—and if this building were not located over water but in a coastal (10-percent surcharge) county in a zone carrying a 3-dollar base rate, the policyholder would have paid 4.90 dollars per 100 dollars of insurance, calculated as follows: 3 dollars times 0.75 times 1.1 times 1.1 times 3 times 0.6 equals 4.90 dollars.

The program as planned would have classed service buildings on farms, as well as the house, as dwellings. Fences could be included in the policy. Total insurance coverage for one farmstead would have been limited to 10 thousand dollars. Thus a farmer would have had to decide just how to allocate this coverage among his house and other buildings, their contents, and fences.

Under the 80-percent coinsurance provision, the indemnity would equal the loss times a fraction consisting of (1) the amount of insurance carried, divided by (2) 80 percent of the value of the property; but any indemnity would be limited to the amount of insurance. On dwelling property, an 80-percent coinsurance requirement would be satisfied by 10 thousand dollars of insurance on property valued at 12,500 dollars. With that much insurance, partial losses (up to the insurance)

would be payable in full, as far as co-insurance is concerned. On the other hand, as only 10 thousand dollars of insurance could be obtained, dwelling claims would not be scaled down, because of coinsurance, in the case of properties valued at more than 12,500 dollars that were insured at the maximum.

The deductible amount of 500 dollars plus 5 percent of the remaining loss (considering coinsurance) would then be applied.

The payment under an 80-percent coinsurance contract would amount to (1.1875 times amount of loss times ratio of insurance to value) minus 475 dollars. Under a "flat" coverage contract, it would amount to (0.95 times amount of loss) minus 475 dollars. These formulas combine the coinsurance (if any) and the deductible calculations. Minus results indicate that no indemnity is due.

The maximum payable was also limited to the amount of insurance or the amount of the loss, whichever would be less. For example, under 80-percent coinsurance on a building insured for 5 thousand dollars but valued at 12,500 dollars, nothing would be payable for a loss of 1,000 dollars and 1,900 dollars would be due on a loss of 5 thousand dollars. Under identical conditions, the flat-coverage contract would pay 475 dollars and 4,275 dollars, respectively.

The future of Federal flood insurance is uncertain. Any new program probably would differ from the one we described. The research and planning of the Federal Flood Indemnity Administration might provide a basis for some future program, however.

**MISCELLANEOUS** forms of insurance available on farm (as well as on urban) property include the personal property floater which covers personal property belonging to and used or worn by the insured person or members of his family. The policy is all risk in character. It covers loss by theft and damage by flood and even extends to house-

hold goods. So a person with other insurance on the contents of a dwelling would have duplicate coverage against damage by fire, windstorm and related perils. Payment for any loss would be shared by insurers.

New forms and combinations of insurance are constantly evolving. A so-called "package" policy, now available to urban homeowners, may soon be made available to farmers. Under it, liability and minor perils are covered in the same policy with the property insurance.

**THIS CHECKLIST** may be helpful:

Be sure your fire insurance is adequate. Replacement costs have increased greatly. Household contents and personal property are most likely to be underinsured.

Do you have deductible wind (or extended-coverage) insurance? By bearing the small losses yourself, you save premiums.

Do you have personal liability insurance? It is almost as necessary as fire insurance. You also need employer's liability or workmen's compensation insurance if you hire workmen. Increased liability protection (higher limits) costs only a little extra. The liability on your car applies only to its operation.

Do you receive all rate credits due you because of fire-resistive construction, a central heating plant, lightning rods, and so on?

Are policies in your name? Are all buildings covered? Are some insured that have since been torn down? If property has been mortgaged, did you notify your insurance company? An insurance contract is a personal one. It does not follow the property.

Could you make out if you lost your principal cash crop? If not, you need all-risk crop insurance to cover production costs. It may be available in your county. Crop-hail insurance also can be obtained from private insurance companies to cover crop losses due to hail damage. This insurance can cover profits above costs.