AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

F. S. - 71

NOV 20 1937
no. 71

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS

CROP INSURANCE IN FOREIGN COUNTRIES

A Summary of
Significant Developments

Washington, D. C.
October 1937

CONTENTS

	Page
Introduction	1
Europe	
Belgium	1
France	1
Switzerland	3
Germany	4
Czechoslovakia	4
Poland	5
Hungary	6
Yugoslavia	6
Rumania	8
Bulgaria	8
Greece	9
Spain	9
Italy	12
Orient	
Japan	14
China	16

- - - - - - -

CROP INSURANCE IN FOREIGN COUNTRIES 1/

With the growing interest in Federal crop insurance in the United States, the question arises as to what governments in other countries have done to solve this problem. While proposals for extensive crop insurance have been made abroad, foreign countries, with the exception of the Soviet Union, 2/ have so far confined practical application of such insurance to specific risks, principally hail. These schemes, therefore, hardly afford any actuarial basis for the development of "all risk" crop insurance in the United States. Some of the foreign insurance schemes and proposals, however, are not without interest, and significant developments in this field, by countries for which information is available, are discussed in this report.

Europe

Belgium

A compulsory "all risk" crop insurance scheme has been under discussion in Belgium for some time. It is reported to have the backing of the powerful Peasants' League. So far only the broad lines of the proposed scheme are known. It is planned to make compensation payments to farmers whenever yields fall below a fixed level, e.g., to 50 percent of the average yield or of the yield forecast for the year on the basis of crop conditions at a given time. Thus, for instance, no one who had a 60-percent crop would be eligible for an indemnity. Some payment might be made, however, when yields were 50 percent, with the compensation increasing as the loss became greater. Thus it seems that the plan in general is to assist in extraordinary cases and not to insure against normal production hazards.

It is planned to raise half of the fund required to finance the scheme by means of an annual levy per acre of farm land, collected with the taxes. The other half will be supplied by the Government. No doubt the levy would vary with the different types of crops and with the producing region, according to the frequency and extent of damage.

France

Bills aiming at Government-operated insurance of crops against hail and other risks have been brought before the French Parliament approximately 25 times since 1821, when the first proposal was made. Most of these schemes advocate payment of insurance premiums in the form of a surtax on landed property and provide for compensation only in case of serious and therefore unusual damage. One bill, however, introduced by

---

1/ Prepared by Walter Bauer, agricultural economist, Farm Credit Administration, formerly agricultural economist, Agricultural Adjustment Administration, detailed to the Bureau of Agricultural Economics.
2/ Crop insurance in the Soviet Union is discussed in Foreign Agriculture, vol. 1, no. 9, September 1937.

Deputy Quinta in 1890 went somewhat further in that it proposed a general surtax on all direct taxes then in existence and compensation for the farmer covering also those production hazards which might be called usual, such as ordinary bad weather as distinct from weather catastrophes. This meant that in years of unfavorable weather conditions the Government would guarantee the farmer an indemnity for the difference between the low yield actually obtained and the normal or average yield of the crop in question.

Despite this evidence of interest in the matter of government crop insurance, France has not as yet undertaken to put any such scheme into practice. A new scheme is under consideration at the present time.

On the other hand, the Government has been interested for a long time in the mutual agricultural insurance associations, whose formation was greatly facilitated by a law of July 4, 1900. The organization of these mutuals is comparatively simple. They have no capital stock, the contribution of each member consisting of an annual premium, the amount of which varies with the type of risk for which the mutual writes insurance. Since the elected president and secretary draw no salary and no profits have to be made, insurance through the mutuals is cheap.

The mutual insurance system covers damage to farm buildings by fire and to crops by hail, accidents to farm labor, and loss of livestock; it also acts in the rural districts as agent for the Government in connection with the compulsory social insurance scheme operated by the Government. It is probably for this reason that the Government exempts the mutual insurance associations from various taxes that private insurance companies have to pay and helps to support them by subsidies either directly to the mutual or in the form of contributions to the premium payments of the policy holders. Regional or departmental reinsurance mutuals, whose membership is made up by the various locals of the region or Department, and two national reinsurance institutions, with which the regional mutuals reinsure in their turn, are also subsidized by the Government. In view of the amount of regimentation and supervision by the Government, as well as on account of the Government aid involved, one might call this system a quasi-official one.

The crop insurance system in operation offers protection for all crops, but against one risk only, namely hail. At the present time there exist no possibilities for insurance of crops against other risks, such as drought, excessive moisture, floods, frost, wind, etc. Since 1932, however, the Government, which in case of major disasters has alleviated the farmer's burden as a rule by tax reductions or cancellations, has maintained the so-called Agricultural Calamity Fund, allocated directly in the budget of the Ministry of Agriculture and increased by certain sums derived from the profits of the National Lottery. Naturally, the size of this fund depends upon the appropriations which Parliament is willing or able to make. It is used for paying indemnities on crop losses and damage to arable land caused by frost, floods, avalanches, hurricanes, and other noninsurable risks. Hail damage to farmers who are not as yet insured against hail with a mutual is also compensated out of this fund. But, since farmers have no legally established claim to such indemnification - no matter how serious the damage is - since, furthermore, farmers having a taxable income of more than 30,000 francs a year are automatically

excluded from indemnification, and, finally, since only 20 percent of any major damage can be taken care of by the Government, 3/ it is readily seen that the Agricultural Calamity Fund does by no means fulfill the functions of a general crop-insurance scheme.

A new plan, however, which according to the press is being developed by the French Government but has so far not been put into effect, would give all farmers real assurance of more adequate indemnification. It would enable them to participate in building up a fund similar to the Agricultural Calamity Fund from some type of land assessment or assessment on the basis of the value of crops. The essential difference is that under the new scheme the farmer would have a claim to, and certainty of, indemnification. This arrangement, therefore, would actually insure the farmer against what is commonly referred to as noninsurable risks, such as drought, floods, frost, wind damage, etc. Compensation for loss is expected to take a form similar to that described in connection with the Belgian scheme. Although this means that only losses of abnormal proportions will be covered, it seems that farmers will be protected much better than heretofore.

Insurance of the so-called insurable risks - that is, hail and loss of livestock, fire, accidents to labor - would be carried on as previously by the mutual insurance associations. For the purpose of coordinating the two types of insurance, it is proposed to create a special agency, the National Committee on Agricultural Insurance and Calamities. On one hand, this committee would administer the new fund for protection against noninsurable risks; and, on the other, it would maintain a new reinsurance service through which the two existing national reinsurance units would reinsure again for insurable risks. The new reinsurance service would take on 80 percent of the risk assumed by the two national units, which in their turn assume 45 percent of the risk of the regional units, the latter assuming 50 percent of the risk of the local units. It is emphasized again that this set-up covers insurable risks only; that is, as far as crops are concerned, only hail.

Switzerland

"All risk" crop insurance has been proposed in Switzerland, but so far the Federal Government has not deemed it feasible. It is interesting to note, however, that the Federal Government, as well as some of the local governments, maintains a special fund for the purpose of subsidizing individuals whose property is damaged by catastrophes against which no insurance is written by private institutions; that is, in particular, against stone or snow avalanches, landslikes, earthquakes, cloudbursts, floods, and hurricanes. As far as the farmer is concerned, damages by fire, hail, insects, livestock epidemics, frost, excessive moisture, drought, etc., are specifically excepted from subsidization, although no private insurance is written against some of these risks. On the other hand, if the damage is caused by the major catastrophes referred to above,

3/ This indemnification limit was set by an order of October 18, 1934. Previously Government payments varied from 25 to 75 percent according to the damage.

compensation may be had not only for damages to crops in the field or to fruit crops and grapes, but also for damages to the soil itself and to the trees or vines. Harvested crops and stocks of agricultural produce are also covered by subsidization.

Aside from maintaining this fund, the Federal Government aids farmers in insuring their crops against hail by contributing 15 percent of the amount payable as premiums to private hail insurance companies.

Insurance operated by the Government exists only in the Canton of Appenzell, where it has been in effect since January 1, 1931. It affords protection for orchards and vineyards, including the crops, as well as for truck crops and the soil on which they are grown against damage by floods, stone or snow avalanches, landslides, and storms. From the material available, it is not quite certain whether field crops in general are included. Also the policy conditions are unknown. It appears, however, that the premium rates charged farmers are rather low and do not yield an amount equaling the indemnities paid out.

Germany

As far as can be ascertained, the only instance of Government-operated crop insurance in Germany occurs in the Free State of Hamburg. Farmers can insure themselves with the State Fire Insurance Office (Feuerkasse) against damages caused by storms and hail to crops grown under glass, and against damages to field crops by hail only. No other risks are included. The premium rates range from 0.7 percent to 1.4 percent. Farmers are not fully reimbursed, inasmuch as they themselves have to bear 5 percent of the damage involved.

Czechoslovakia

Despite the fact that proposals for compulsory crop insurance have been made frequently in Czechoslovakia, so far the only instance of Government-operated crop insurance is the so-called "hailstorm fund" for tobacco growers, which is maintained by the Czechoslovak State Tobacco Monopoly. Tobacco growers pay as premium approximately 4 percent of the sums they receive each year for the tobacco sold to the Monopoly and are fully compensated for damage caused by hail.

Hail insurance on other crops is written by private companies, which are organized in a cartel and charge uniform premium rates considered much too high. On sugar beets, for instance, private companies demand hail insurance premiums of from 5 to 6 percent, while the Syndicate of Sugar Beet Growers of Moravia, which is a non-profit mutual, writes insurance for its 25,000 members at the rate of 1 percent. Private insurance companies are moreover criticized for assessing excessive costs in claim liquidation, amounting to as much as 40 percent, so that in the end the indemnity to the insured equals only 60 percent of the damage. Large companies apparently also discriminate against farmers by excluding them from insurance protection in those parts of the country where hailstorms occur most frequently, that is, in the poor, mountainous sections. Finally, many of the small local companies do not write hail insurance at all.

Compulsory crop insurance by the Government is therefore under discussion at the present time. It would come to the assistance particularly of the small- and medium-sized farms in the regions neglected by private companies, although all farmers in Czechoslovakia would be insured regardless of the size of their enterprise. As the premiums would be collected simultaneously with the land tax, the scheme would entail little expenditure, and a uniform premium rate of only 1 percent is contemplated. The scheme would cover exclusively the hail risk. Little attention is paid to other risks, probably because damage by hail is, as a rule, larger than that from any other cause.

It should be mentioned that the Czechoslovak Government may come to the assistance of farmers whose crops are damaged by hail, drought, floods, and frost when the crop normally to be expected is reduced by one-half, or by two-fifths if the economic position of the farmer is precarious. The funds for such assistance are made available through special appropriations in the budget of the Ministry of Agriculture or of the Agricultural Councils of the various Provinces. Farmers, however, have no legal claim to indemnification, and in the opinion of private insurance companies the extent of relief afforded is unimportant.

The existing agricultural nonprofit mutuals writing insurance against fire (for farm buildings and harvested crops) or loss of livestock (horses and cattle) are frequently subsidized by the Government.

Poland

A beginning has been made in Poland with Government-operated crop insurance, which in the course of time may acquire an "all risk" character. The scheme is an outgrowth of the Presidential Order of May 27, 1937, which, incidentally, made fire insurance on farm immovables (buildings and other fixed structures) compulsory. 4/ This order contains a provision offering the facilities and services of the State Mutual Insurance Office, which administers the aforesaid fire-insurance scheme, to those farmers who wish to carry hail insurance on crops. Such insurance is written by the State office under the condition that district or county representative bodies (councils) vote to make it compulsory for all farmers in their respective territories.

It its present state, therefore, the scheme insures crops only against fire and hail, other risks such as floods, excessive moisture, drought, or frost not being included. One of the chief deterrents to a more rapid development of an "all risk" insurance scheme has been the depression affecting Polish farmers. It is claimed that with the improvement of the agricultural situation and with the preparatory steps taken thus far, gradual extension of the scheme to other risks is entirely feasible. Successful operation of the present scheme in 18 Provincial

4/ A special system of compulsory fire insurance of farm movables (crops, livestock, agricultural machinery, etc.) is in force, however, throughout Poland for farms of less than 50 hectares (123.5 acres). A project is now being worked out with a view to making this compulsory fire insurance of farm movables applicable to all farms, regardless of size.

districts covered by compulsion and the readiness of farmers to adopt it in other districts, of which about 10 new ones are likely to be embraced by the end of 1937, seem to afford evidence of its desirability.

The central Government of Poland has no definite policy as far as the ever-normal granary aspects of the crop-insurance scheme are concerned. Some of the local governments, however, notably in the Provinces of Lublin and Polesie, are experimenting on their own initiative with a scheme that eventually may result in a general granary plan for all of Poland. In these districts, farmers are contributing annually two kilograms of rye per morg (3.2 pounds per acre) to a county fund, which they can rely upon after crop failures.

Hungary

Hail insurance is available to farmers through private agencies, largely cooperative societies. Since flood damage is of a certain importance - the average area flooded annually amounting to approximately 167,000 acres - and since insurance against this risk is not written, it has been proposed that some agency take up the insurance of crops against floods and cloudbursts. 5/ Damages to the soil itself would not be insurable. Crop damage below 5 percent of the amount insured would not be compensated, and only part of a more serious damage would be compensated by the proposed agency in the form of insurance, the remainder to be given as a loan, free of interest, to the damaged party, repayable in instalments within 5 or 10 years. The agency writing this combination of insurance and emergency loan would enjoy Government support in the form of advances from the treasury at low interest rates, to be amortized over a long period of years.

If the arrangement whereby the damaged parties would be compensated only partially by insurance and would receive repayable loans for the remainder does not meet with the approval of the policyholders, there is the alternative of full compensation but by instalments over a period of 5 or 10 years. In this case, however, the annual premiums would have to be raised considerably.

Yugoslavia

The central Government of Yugoslavia does not engage in crop insurance operations. On the basis of a law of February 10, 1931, however, it may enforce compulsory crop insurance against hail if requested by the local governments of the Provinces. Since 1932, five Provinces have asked for such insurance; but, as far as can be ascertained, it has been enforced in the Sava Province only. Each Province may issue special regulations concerning the procedure to be followed, which must be approved by the Minister of Agriculture of the central Government.

It is understood that the various sets of regulations follow the same general lines and differ only in minor respects. In all probability, therefore, the regulations for the Danube Province, which are summarized below, are more or less typical.

5/ M. Kornis, Zeitschrift für die gesamte Versicherungswissenschaft, 1927, p. 232.

The scheme of the Danube Province covers insurance against hail for field crops and the produce of gardens, orchards, and vineyards. The premium rates on the various crops are fixed annually by a special Provincial Board for Insurance of Crops against Hail. 6/ Premiums are collected through the township administrations and deposited by them with an officially designated bank. Either landowner or tenant may pay the premium in one or two instalments, but it must be paid up in full by the end of April. In the case of sharecropping, the landowner is solely responsible for the premium, but agreements can be made between him and the sharecropper regarding its dubdivision.

The payment of compensation is effected in the name of the Provincial government by the board referred to through the administration of the townships in which the damage occurs. If it does not exceed 10 percent of the crop, no compensation is awarded. From the total damage, five percent is deducted. Determination of the percentage of damage is entrusted to a committee consisting of two members of the agricultural board of the township, appointed by the chief administrator of the district (subdivision of Province), and the district agricultural commissioner as third member.

In case of complaint, the estimate of the damage may be changed by a revision committee consisting of three officially designated experts, whose decision is definitely binding. For the guidance of the damage appraisal committee in estimating the percentage of damage, the Provincial board fixes annually a schedule of maximum yields for each crop and region. Lower yields may be used as a basis by the appraisal committee in individual cases only if poor cultivation is obvious or if there is crop failure from causes other than hail during the year in question. Differences in the quality of soil in one and the same locality are at the time of damage appraisal no reason for making use of yield figures below the standard set by the Provincial board. This ruling can work out to the advantage of farms having poor soil, because they are credited with a larger crop than they would have had and therefore may enjoy a larger compensation than would be due to them if their normal yields were taken as a basis in estimating their loss.

For the purpose of calculating the indemnity to the farmer, the Provincial board fixes annually for each region the prices of crops, which are largely based upon the market price during the preceding year.

If in a year of particularly heavy hail damage the amount of premiums collected and the reserve fund, into which 60 percent of the annual surpluses must go, whould not be sufficient, the regulations provide for government subsidies without specifying whether they are to come from the Provincial or the central Government.

6/ The board consists of the following persons: The assistant of the Provincial Administrator as president, the chief of the agricultural administration as acting president, the chief of the financial administration, the chief of the crop and livestock section of the agricultural administration who shall be at the same time the referee of the board, and three individuals appointed for 3 years who shall be either members of cooperatives or educated farmers of the Province.

Rumania

The Ministry of Agriculture is reported to have worked out a project of insurance legislation covering livestock loss, damages by hail to crops, and by fire to farm buildings. It is understood that a Government Monopoly of Agricultural Insurance will be created and operated by the Ministry of Agriculture. Insurance will be obligatory, while premiums will vary with the size of the farm. They are intended to be particularly low for small farms.

Bulgaria

Foundations for "all risk" crop insurance by the Government were laid by a law of January 13, 1911, according to which insurance against hail was provided for. It was planned later to include frost, drought, flood, and other risks. It is believed that another law providing for Government subsidies to noninsured farmers whose crops were damaged by weather calamities handicapped further development of the crop-insurance scheme until December 1932 when this law became ineffective. Since then, however, frost has been added to the risks covered by this scheme.

Practically all crops grown in Bulgaria, including the produce of orchards, vineyards (except those stocked with American and other foreign varieties of grapes), and pastures can be insured against hail and frost. Farmers are enabled to make crop-insurance contracts individually as well as collectively with the Agricultural and Cooperative Bank, which is a Government agency. The Government is authorized to subsidize the insurance scheme to the extent of 8,500,000 leva ($102,000) annually. Additional subsidies are given by rural communitites to the extent of 1 percent of their respective budgets. These contributions amounted to 1,835,000 leva ($22,000) in 1935. They are used for reducing the premium payments of the insured farmers in the corresponding district. In normal years the scheme yields a surplus and the reserves that have been built up seem to be largely sufficient to take care of emergency requirements. In 1935, for instance, when weather conditions were particularly bad, the Government subsidy amounted to 2,000,000 leva ($24,000) only. Generally speaking, therefore, the scheme is successful, and the number of farmers taking out policies has increased from 32,524 in 1926 to 122,637 in 1935. Although farmers are not forced to insure their crops, it is understood that the Government would like to make crop insurance obligatory. Bulgarian farmers are heavily indebted to various banks, including the afore-mentioned Agricultural Bank, and the fact that the credit institutions involved have agreed to issue loans only to farmers who have crop insurance contracts has probably helped to increase the number of policyholders. The Agricultural Bank issues loans up to 50 percent of the value of crops offered as security by policyholders.

From the administrative viewpoint, it is interesting to note that the central board of the insurance system, whose decisions are subject to the approval of the Minister of Agriculture, includes as voting members 7 policyholders appointed for the duration of 3 years by the government of each district, one Government commissioner, and the president of the Agricultural Bank. The appraisal of damages is left to local committees consisting of the agricultural county agent of the Government, the director

of the local branch of the Agricultural and Cooperative Bank, two agricultural specialists, and two farm owners, preferably policyholders or members of cooperatives. Recourse to decisions of these committees is possible, and if after a second appraisal of the damage the policyholder still believes he has reason for complaint, the special insurance adjustment board of the bank renders final decision.

Premiums must be paid to the tax collectors. Premium rates vary greatly with the type of crop insured, the local risk, and the amount of insurance carried. A 50-percent reduction in the premium is made if the policyholder has carried uninterrupted insurance for a period of 5 years, while another reduction amounting to 5 percent of the premium is made to individuals paying their premiums before July 15, the insurance year running from March 15 to October 15. Finally, special premium reductions not fixed by the law are made on collective insurance policies.

The insurance value of the various kinds of crops is determined in accordance with an officially fixed schedule of maximum income per acre derived from each crop. In the case of small grains, 80 percent of the insurance value applies to the grains and 20 percent to the straw. For corn the relation is 90 percent on grain and 10 percent on stalks; for fodder plants, 70 percent on the seed and 30 percent on the straw; for flax and hemp, 70 percent on the fiber and 30 percent on the seed. In the case of orchards in which other crops are grown between the trees, the owner himself may fix the percentage for the various products.

The payment of compensation is governed by the following principles: Damages from frost are compensated only when over 20 percent, from hail when over 8 percent. The percentage of damage as determined by the appraising committee is reduced for the purposes of compensation; e.g., damage up to 10 percent by 3 points, up to 20 percent by 4, up to 30 percent by 5 points. Damage of 100 percent is reduced by 12 points.

Greece

The Greek Government has shown some active interest in crop insurance inasmuch as it established in 1926 a central hail and frost insurance fund under the supervision of the Ministry of Agriculture, Commerce, and Industry. The purpose of this fund is to reinsure the hail and frost risks on vineyards and tobacco plantations assumed by local mutual insurance organizations, such as the insurance funds of agricultural associations. The security guaranteed to these cooperatives by the Government reinsurance fund might eventually lead to an extension of the system to risks other than hail and frost and to a wider range of crops.

Spain

The Spanish Government became interested in crop insurance shortly after the war. At first, when striking farm laborers set fire to field crops as well as to olive groves, orchards, and vineyards, a decree of April 11, 1919, authorized the Official Committee of Marine Insurance, which since 1917 had handled maritime war-risk insurance, to assume for the Government the insurance of crops against fire, whatever its cause.

At the same time, the committee was authorized to reinsure the existing mutual hail-insurance societies. Shortly thereafter, another decree (May 8, 1919) empowered the committee to insure and reinsure all agricultural property against losses by acts of violence, including the collective abandonment of work on the part of farm laborers, on account of which crops frequently remained unharvested or spoiled in the fields and orchards. This beginning soon led to legislation on crop insurance in general (decrees of September 9 and November 14, 1919). A National Institute for Mutual Insurance in Agriculture and Stock Breeding (Mutualidad Nacional del Seguro Agropecuario) was established as an independent agency. Government influence on its affairs and organization, however, was quite strong. Not only was it started with Government funds and could rely on subsidization from year to year, but also its president and secretary general were both Government officials. Likewise, representatives of several branches of the Government, as well as those of agricultural associations and the policyholders had vote on the board of directors. Policyholders, provided they were grouped in a mutual of more than 1,000 members, could have one representative for every mutual society.

Insurance by this institute was supposed to cover, aside from loss of livestock, damages to all kinds of crops caused by hail, fire, plant pests, frost, excessive moisture, floods, and drought. By 1923, however, its business was still restricted to hail insurance alone; and, as far as can be ascertained, none of the other risks, except loss of livestock, seems ever to have been covered. One of the principal functions of the institute was to acquaint farmers by various propaganda with the advantages of insurance and to extend thereby the network of mutual insurance societies.

Although the institute could write insurance directly with farmers, it appears to have placed more emphasis on fostering the development of mutuals, of which a number were in existence at the time and with which the institute was held to cooperate by affording possibilities for reinsurance, as well as by placing its propaganda and research apparatus at their disposal. Most of these mutuals were writing hail insurance only, with few insuring against other risks. In fact, the decree of November 14, 1919, provides that, for the purpose of insurance against risks other than hail and loss of livestock, special mutual aid societies, as distinct from the ordinary insurance mutuals, should be formed. The hail insurance of crops was to be operated by the Mutualidad as follows:

The policyholders, that is, individuals contracting directly with the Mutualidad or agricultural associations insuring their members collectively or existing insurance institutions reinsuring with the Mutualidad, pay certain basic premiums whose rates are fixed by the Board of Directors according to the kind of crop involved and the degree of risk prevailing in a particular locality. After deduction of a percentage for administrative expenses, the premiums constitute the Compensation Fund, the first source to be drawn upon for compensation of damages. An additional premium of from 10 to 15 percent of the basic premium is destined to go into a Temporary Reserve Fund, which, if not used up, is transferred every year to the General Reserve Fund. If in any one year the combined Compensation and Temporary Reserve Funds, plus 25 percent of the General Reserve Fund should not suffice to make compensation payments, the Government is

authorized to help out with subsidies. On the other hand, any annual surplus of the Compensation Fund is transferred to the Accumulated Surpluses Fund, which is not used for paying indemnities on damages. Policyholders are credited on this fund each year with a percentage share in the total surplus corresponding to their percentage share in the total amount of premiums paid that year into the Compensation Fund. After termination of their contracts, i.e. after 5 years, an amount equaling their five annual shares in the surplus is paid out to policyholders. In other words, if weather conditions are favorable during these 5 years, the policyholder is likely to have a large part of his basic premium payments restored.

Although in 1929 the Government changed the name of the Mutualidad to Commissariat for Agricultural Insurance (Comisaría de Seguros del Campo), business seems to have been carried on without major changes in the general principles and without extending the scheme to risks other than hail and loss of livestock. New legislation in 1934, however, effected material changes. 7/ From then on, the scheme was no longer handled by a quasi-independent agency, such as the Mutualidad or the Commissariat, but directly by the Agricultural Insurance Service of the Government. Thereby the influence of policyholders on the management of the organization was considerably restricted. The former board of directors, on which policyholders had representatives with vote, according to the new law has only advisory capacity.

A difference is made between insurable and noninsurable risks. To the first group belong hail, fire (crops and forest), and loss of livestock; to the second belong drought, frost, floods, excessive rains, hurricanes, and plant diseases and pests. Insurable risks, that is, as far as crops are concerned only hail and fire, are being taken care of by the Government in three ways:

(a) First of all, existing agencies that write crop insurance, no matter whether they are mutuals or private stock companies, may obtain reinsurance from the Government, provided they apply the premium rates proposed by the Government and submit to Government inspection of their books and arbitration by Government experts in case of litigation. Mutuals must have at least 500 members, and the value of total insured crops must amount to at least 5,000,000 pesetas, provided more than two kinds of crops are insured. Otherwise the mutual must have at least 1,000 members, and the total value of the insured crop or crops must be at least 10,000,000 pesetas. For the purpose of insurance of crops against fire alone, the number of insured members must be at least 300 and the total value of the insured crops 1,000,000 pesetas. Mutuals must also prove that they belong to a federation of mutuals operating throughout the territory of the Nation.

More favorable terms for reinsurance with the Government are obtained if no limits are placed on the acceptance of risks. Reinsurance is then possible to the extent of 90 percent. Private companies and mutuals which place limits on the acceptance of risks or offer choice of risks may obtain reinsurance with the Government only to the extent of 50 percent of all risks.

7/ Decrees of January 11 and 19 and Order of February 19, 1934.

(b) The Government may grant so-called subsidiary insurance contracts to those mutuals that conform with the rules described above and place no limit on the acceptance of risks. At the maximum, 10 percent of the paid-up premiums of the previous season is covered, but the Government charges no commission for this service. Private companies and such mutuals as place limits on the acceptance of risks are not eligible for subsidiary insurance.

(c) The farmer may be insured directly by the Government. Such direct insurance may be made compulsory, if the Government desires, but it may be written only if an insurable risk is not covered by private companies or if private insurance is operated in a manner prejudicial to the policyholders. As soon as a private company takes up a particular kind of insurance written by the Government or improves its business practices to the satisfaction of the Government, direct insurance by the latter ceases. When the country has a paramount interest from the viewpoint of national economy in the preservation and development of farm or forest land, the Government may write direct insurance on particularly favorable terms not fixed by the law.

The insurance activities of the Government are financed mainly from a surcharge not to exceed 5 percent on the premium payable in connection with private insurance contracts. Other sources are the profits from investment of reserves, commissions collected for reinsurance, and subsidies from the central as well as the local governments. Surpluses are accumulated in the Auxiliary Reserve Fund, which is to be used for the subsidization of so-called mutual aid funds or banks formed by farmers in order to cover noninsurable risks. 8/ The law does not specify to what extent and in which way these institutions will have to participate in relieving rural distress brought about by drought, excessive rains, frost, and plant diseases or pests. It does specify, however, that they will have no function in compensating individual farmers for losses resulting from floods or hurricanes. In such instances, the law provides for grants in aid by the Government through the Insurance Service, but it is emphasized that these grants are intended exclusively for the encouragement of public works of agricultural interest in the affected areas and can not be employed to compensate individuals.

Italy

Crops in Italy are, as a rule, not insured against risks other than hail. Around 20 private stock companies, 4 mutual societies, and some 30 mutual farmers' societies of local scope share the business. Their policies are rather definitely established, not only by legislation but also by agreements between the National Fascist Farmers Federation and the National Federation of Insurance Companies with which all insurance enterprises are affiliated. No branch of the Government proper is engaged directly in operating the hail insurance system of Italy. Through the medium of the Federation of Insurance Companies, which, owing to the structure of the corporative State, may be considered as a semi-official

8/ It appears, therefore, that policyholders no longer enjoy the possibility of having part of the amounts paid as basic premiums restored to them, which, it may be recalled, could happen under the old scheme.

Government agency, the influence the Government may exercise on the affairs of insurance companies is tantamount to Government direction. Before the advent of the Fascist regime, apparently not all hail-insurance organizations gave satisfactory service, for in 1914 a proposal was made to create a governmental hail-insurance institute, which would gradually make private hail-insurance companies unnecessary. At that time the latter were criticized mainly on the grounds that they gave more attention to profits than to the economic and social functions of insurance. Moreover, it was found that about 50 percent of the cases on which private companies allowed compensation represented minimum losses, that is, from 1 to 8 percent. The frequency of such minor damages made premium rates high. In order to help the seriously stricken farmer, premium rates would have had to be considerably lower. Under an agreement of 1928 between the National Fascist Farmers Federation and the National Federation of Insurance Companies, therefore, the companies enjoy nonliability to the extent of 8 percent on tobacco, melons, and fruit, of 6 percent on hemp, corn, tomatoes, beets in seed, castor beans, and grapes, and of 4 percent on all other crops. The argument is that bearing these minor losses does not impose any particular hardship on the farmer, whereas the nonliability of insurance companies in respect to such losses is certain to result in worth-while reductions in premium rates and, above all, in important savings in the cost of damage evaluation.

In 1926 a project for Government-operated insurance against major crop risks was submitted for consideration to the Italian Government by A. Modigliano, a Milan lawyer, but has not been adopted so far. According to this project, damages to buildings, no matter whether urban or rural, and te crops, caused by earthquakes, landslides, volcanic eruptions, avalanches, floods, tornadoes, and locusts, would be compensated on the basis of the average price at which the destroyed crops could be sold, provided that it would be impossible to raise and harvest a second crop during the season in question. If, however, there should be sufficient time to allow this, the farmer would be compensated only to the extent of his outlay for soil preparation and sowing in connection with the second crop. Insurance of the soil itself is also included in the scheme, though the conditions under which this is to be done are not specified in the project. It was proposed to raise the funds for this insurance scheme by a surtax of 2 percent on the existing real-estate and building tax. Since the latter amounts to 1 percent of the assessed tax value of the landed property in question, the surtax or the insurance premium would amount to 0.02 percent of the assessed tax value.

In case of major disasters, such as earthquakes, landslides, and floods, the Government usually comes to the aid of farmers, while in case of plant pests and insect damage farmers resort to the formation of the so-called consortia, which are mutual aid associations Italian farmers have long known. Some of the consortia for plant protection have been developed by the Government into permanent institutions, and participation in them has been made compulsory. Through their activities, these consortia no doubt have prevented considerable crop damages in three important branches of Italian agriculture; namely, grape growing (by phylloxera), olive growing (by the olive fly), and citrus-fruit growing (by the cochineal).

In several instances, the consortia have significant economic functions and provide for their members what might be called an ever-normal

granary plan for the purpose of stabilizing prices and of thus assuring the grower a fair share of the profits. Voluntary collective storage schemes are available to producers of wine, olive oil, cheese, cork, potatoes, onions, garlic, saffron, nuts, and beans. Since 1936, obligatory collective storage has been provided for wheat (voluntary from 1930 through 1935), hemp, flax, and bergamot oil, and is being organized for silk cocoons and wool. As many of the consortia are of rather recent date, it is not possible to decribe their organization in detail. In a general way, it may be said that they enjoy not only moral but also some material support from the Government, inasmuch as public buildings are placed at their disposal and subsidies are paid for the construction of storage facilities.

Because of the great number of wheat growers and the importance of wheat production in the national economy, the storage system for wheat goes beyond the scope of limited consortial action. Within 30 days after threshing, all wheat growers or holders of wheat must deliver their crops to the Government-controlled wheat-deposit center of their district or store the wheat on their own premises until they are called upon to deliver it. They may retain, however, quantities at the rate of approximately 660 pounds per person annually for consumption on the farm and at the rate of 178 pounds per acre of land for seeding. Any surplus remaining from these reserves must be delivered to the deposit center. Farmers receive advances on the wheat stored and are guaranteed a fixed price. The wheat in storage remains their property until sold by the deposit center. The cost of storage is included in the price that consumers pay when buying from the deposit center.

Orient

Japan

Unfavorable agricultural conditions caused the Japanese Government to call on a German economist to make an analysis of the principles of agricultural insurance with a view to practical application in Japan. His report on the subject was published in 1889. 9/ It is interesting to note that it recommends crop insurance as part of an integrated program, including relief and commutation of taxes, as a means of meeting the problem of crop failure, irregularity of income, and frozen credits. But it was not until 1929 that the Government gave official support to agricultural insurance efforts by establishing a Livestock Insurance Section in the Bureau of Animal Industry of the Department of Agriculture. This section is to promote insurance mutuals not only by regulating their activities on a uniform basis and controlling their accounts, but also by enabling them to reinsure themselves with the Government. Moreover, the Government contributes to the operating expenses of the mutuals. Thus the number of livestock insurance cooperatives has increased from 9 in 1930 to 248 in 1936, despite the depression.

Crop insurance, however, is still under consideration. To be sure, the Japanese Government maintains a permanent fund for assistance to

9/ P. Mayet, "Agricultural Insurance: Notes on Agricultural Insurance in Organic Connection with Savings Banks, Land Credit, and the Commutation of Debts."

farmers whose crops have been seriously damaged or destroyed, but in all probability such relief does not yield the same amount of compensation that insurance would provide. Owing to the economic situation, no crop-insurance scheme has been put into practice, although special studies to that end have been made from 1928 to 1931. Since the recent rice- and cereal-control laws have brought about a certain stability in Japanese agriculture, the Government expects soon to be able to establish a crop-insurance system. According to the only source available at the present time, 10/ the plan appears to be as follows:

Rice crops and mulberry trees, as well as the farm rentals that landowners receive from tenants in connection with these two crops, may be insured to the extent of 70 percent of their value with so-called insurance guilds, consisting of the farmers concerned, against damage by storm, excessive rains, floods, drought, and frost. It is understood that the possibility of including damage by other causes is being studied. Such insurance can be made compulsory if the insurance guild of a district deems this to be advisable. The insurance guilds, however, are obliged to reinsure themselves, the Government taking care of the cost connected with reinsurance. Moreover, if necessary, the Government assumes for the duration of 5 years after organization of an insurance guild the whole amount of administrative expenditures.

The rates at which guilds insure the farmer must be approved by the Ministry of Agriculture. They vary with farming conditions and the frequency or seriousness of damage hitherto experienced in the different regions. The size of compensations is determined in each township or village by an appraisal committee, which consists of representatives of the insurance guild, agricultural associations, and the Government. Crop damage below 30 percent is not compensated at all. In fact, for the purposes of compensation 30 points are always deducted from the estimated percentage of actual damage; that is, if 80 percent of the crop has been destroyed, indemnification is paid only to the extent of 50 percent. The value of the damaged crop is based on the unit price prevailing at the time when the insurance was written.

While rice and silk producers are covered by the scheme described above, other crops can apparently be protected to a certain extent by a different scheme. As no dividends are paid by the insurance guilds to policyholders, half of the annual profits of a guild is put up as a reserve in connection with the insurance on rice and mulberry trees, while the other half is transferred to a so-called masonry reserve. Apparently, also, 15 percent of the annual premiums paid in connection with the insurance scheme proper flows into this fund. Policyholders own a share in the masonry reserve, probably in proportion to the amount of their premium payments. The share can be paid out to them if poor crops are harvested as a result of unfavorable weather. This seems to imply that the policyholder is protected to the extent of his share in the masonry fund against all more or less normal production hazards to any kind of crop not covered by insurance proper and is compensated accordingly.

Moreover, the Government seems to be prepared to give financial assistance to insurance guilds if the latter should be obliged to make

10/ "Keizai Chishiki" (Economic Knowledge), Vol. 2, Series No. 16, August 1936.

payments out of the masonry fund to policyholders in order to compensate catastrophic damages to any crop, including silk cocoons, caused by harmful insects and other factors beyond human control, as well as in case of damage to crops before insurance goes into effect. 11/ Finally, it seems that financial assistance is rendered also if farmers incur losses through fire, sickness, inability to plant, or serious slumps in the rice market.

China

Ever-normal granary plans seem to have found application in China. It was reported in the November 7, 1935, issue of the Canadian journal "La Presse", that the Chinese Government had divided the Province of Hopei into several grain-storage districts. Granaries were to be built for the storage of approximately 2,000,000 bushels of wheat as a reserve supply for the 35,000,000 inhabitants of the Province. Details as to the administrative features of the scheme and Government aid related thereto are not available.

Crop insurance also is not unknown in China. From the scanty information available on the subject, 12/ it appears to take the form of mutual aid societies that do not receive any Government support. Many of them insure the farmer against sickness and his crops against floods, drought, and locusts. They also engage in the insurance of farm buildings against fire and of bridges, dikes, roads, and other structures against damage of various kinds. Frequently, however, these societies are formed only after the damage to crops has been done, so that their function is assistance rather than insurance.

- - - 0 - - -

Source Material

Reports from the foreign representatives of the Department of Agriculture, State, and Commerce.
Literature listed in Agricultural Economics Bibliography, No. 67, "Crop and Livestock Insurance."
Material contained in "Elementarschaeden und Versicherung" by H. Lanz-Stauffer and Curt Rommel, 2 vols., 1936.

11/ Rice, for instance, is insured only during the period starting a month before the plants have ears and lasting until harvesttime.
12/ Yu Peo, "Associations de Credit Mutuel Rural et Associations Similaires en Chine", Paris, 1936, pp. 132-134.