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# ZENGYOREN REGIONAL CONFERENCE ON INSURANCE AND CREDIT FOR SUSTAINABLE FISHERIES DEVELOPMENT IN ASIA

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### **GLOSSARY OF TERMS IN INSURANCE**

FAO Secretariat, Rome, Italy

### Accident

An unplanned event, unexpected and undesigned, which occurs suddenly and at a definite place.

#### Act of God

An event arising out of natural causes with no human intervention which could not have been prevented by reasonable care or foresight, e.g. floods, earthquakes, windstorm.

#### **Actuarial**

Describes the calculations made by an actuary. Essentially this is a branch of statistics, dealing with the probabilities of an event occurring. Actuarial calculations, if they are to be at all accurate, require basic data over a sufficient time period to permit likelihood of future events to be predicted with a certain degree of certainty.

#### **Actuary**

An actuary in insurance is a highly skilled specialist trained in mathematics, statistics and accounting who is responsible for the application of mathematical doctrine of probabilities to vital statistics in deriving rates, premium, reserves, dividend calculations and other statistics pertaining to an insurance business particularly life assurance.

#### Aquaculture Insurance

Provides protection against loss or perish to growing aquatic animals and plants as well as against loss or damage of aquaculture installations in use.

### Area Approach

An agriculturally homogeneous area can be an insurance unit. In loss adjustment in this approach, the actual average yield is assessed by sample survey through crop cutting or other methods, and compared with the normal yield. The same decreased rate is applied to the land of all the farmers, disregarding differences in actual damage and crop yield.

# **Brokerage**

That portion of the premium received by the broker as the fee for services rendered in the insurance contract.

# **Burning Cost Basis**

As the claims settlement is not on the same proportion for the direct underwriter and the reinsurer of non-proportional reinsurance, it will not serve to divide the premium in proportion. The rating is usually done on a "burning cost basis". That is to say that the reinsurance premium rate is based on the claims cost of the reinsurer with the direct underwriter compared with the gross premium income of the direct underwriter as a percentage, for that class of business, i.e.,

Burning Cost = \*Reinsurer's Claims Cost x 100
\*Direct underwriter's gross premium

\*for that class of business.

This is usually loaded by an agreed percentage say 100/80ths to provide for factors like administration cost and expenses, reinsurance commission, declining experience, inflation, profit and contingency.

# Capacity

The largest amount of insurance or reinsurance available from an insurance company or in the insurance market place.

# Captive Insurance Company

Insurance company established and owned by large industrial or commercial groups, or by trade, professional and other associations, to write primarily the insurance business of their parent, subsidiaries, affiliates or associates.

# Ceding Company

The direct insurer who places or cedes all or part of its original insurance it has written to another insurer, or insurers.

### Commission

That portion of the premium paid by the insurer to the agent as remuneration for his services in procuring and servicing the policy holder.

# Compulsory Scheme

Any form of insurance scheme required by law. In fisheries and agricultural insurance this relates to a scheme which has the legislative authority to compel participation by fishermen or fishfarmers owning fishery production assets and growing aquatic animals/plants covered by the scheme. See "voluntary scheme".

### <u>Credit Crop Insurance</u> (linked with agricultural credit system)

Coverage is decided based on the normal yield and the cropped area of each insurance unit of a farmer. It is irrespective of the value of his crop production loan.

# Crop Credit Insurance

Coverage is decided based on the amount of the production loan of individual farmers. Each farmer has a different amount according to the different value of his loan, regardless of his cropped area.

## Crop Insurance

Provides protection against damage or loss to growing crops including perennial crops such as tree crops against specified or multiple perils; examples, hail, wind storm, fire, flood. Measurement of loss could be by "yield" basis, production costs basis, agreed value basis or rehabilitation costs basis.

# Damage Rate

See "Insurance damage rate".

## **Experience Rating**

Rating each insured according to his own loss/accident experience is taken into consideration. Such rating is only feasible if the insured has a large value and premium base.

# Facultative Reinsurance

Reinsurance by offer and acceptance of individual risks, wherein the reinsurer retains the 'faculty' to accept or reject the risk offered by the ceding company. Acceptance is normally on proportional basis.

This method has the advantage that the ceding company can pick and choose which risks to reinsure and upon what basis and the reinsurer can exercise his underwriting judgement case-by-case.

The advantages are, however, in nearly all cases outweighed by the expenses and inconvenience of such a method. However, facultative reinsurance is commonly used in crop insurance business for specific crop programmes, especially in the early years.

### Fish Catch Insurance

Provide protection against the decrease of catches in value terms; when the gross income has not reached the guarantee yield, the balance between the guarantee yield and the present yield is compensated.

# Fishing Gear Insurance

Provide protection against loss or damage of fishing gear in fishing operation; the indemnity will not exceed the insurance value established for each gear.

# Fishing Vessels Insurance

The compensation for the loss or damage of fishing vessels caused by natural calamities or accidents in fishing operations; indemnity does not exceed the limit of the insurance value as stipulated in the relevant laws.

#### **Gross Premium**

The aggregate of the renewal premium plus operating expenses, commissions, reserves and other expenses paid by the insured (see premium).

### Guarantee Yield

Means the highest limit of yield of fisheries and aquaculture insurance liability, and generally, this is a basis of coverage value.

## **Indemnity**

The amount payable by the insurer to the insured, either in the form of cash, repair, replacement or

reinstatement in the event of an insured loss which amount is measured by the extent of the insured's pecuniary loss, is termed the indemnity. It is set at a figure equal to but not more than the actual value of the subject matter insured just before the loss, subject to the adequacy of the sum insured. This means, for many crops, that an escalating indemnity is established, as the growing season progresses.

#### Insurable Yield

Maximum yield to be covered, normally expressed as percentage of potential yield; it normally represents costs of production and has the advantage of requiring in <u>situ</u> appraisal and hence, better underwriting procedures.

### Insurance

Is a financial mechanism which aims at reducing the uncertainty of loss by pooling a large number of uncertainties so that the burden of loss is distributed. Generally each policy-holder pays a contribution to a fund, in the form of a premium assessed by the insurer, commensurate with the risk he introduces, which is established and administered by the insurer and out of that fund are paid the losses suffered by any of the insured.

## Insurance Agent

One who solicits, negotiates or effects contracts of insurance on behalf of his principal (either the insurer or the proposer). His right to exercise his various functions, his authority, and his obligation are subject to the terms of the agency, contract, statute law and common law.

# Insurance Broker

One who represents an insured in the solicitation, negotiation or procurement of contracts of insurance, and who may render services incidental to those functions. By law, the broker may also be an agent of the insurer for certain purposes, such as delivery of the policy or collection of the premium.

# Insurance Coverage

The scope of the protection provided under a contract of insurance.

# Insurance Damage Rate (IDR)

The insurance damage rate = <u>Indemnities paid</u> Amount of insurance

Generally the insurance damage rate is expressed as a percentage and is applied for the sum total of one type of an insurer's business in a given year.

# Insurance Policy

A formal document including all clauses, riders, endorsements and papers attached thereto and made a part thereof which expresses the terms, exceptions and conditions of the contract of insurance between the insurer and insured. It is not the contract itself, but evidence of the contract. In compulsory schemes the individual insured may not hold a formal insurance policy document directly related to the insurance contract but an insurance certificate which gives a brief outline of the insurance terms and conditions.

### Insurance Unit in Individual Approach

This is the basic area of land included in one insurance contract. The two basic choices are between:

(i) the plot as the unit

(ii) the total area of plots growing a particular crop and farmed by one insured as the unit.

The premium rate of (ii) can be expected to be lower than that for (i) since if the farm consists of several plots of, say, wheat, then it is unlikely that each will suffer to the same extent from a given hazard. Indeed, while some plots may produce less than the guaranteed yield, others may produce more, thus offsetting the loss either partially or completely.

In cyprus the plot is taken as the insurance unit. In Japan both systems are used, with a choice being offered to local associations as to which of the two methods they prefer; the farm-unit system involves paying a lower premium.

#### **Insured Peril**

Is the cause of the loss which entitles the insured to recover under the policy; for example, hail, frost, wind, drought, excessive rain, pests and diseases.

## Loss Adjuster

A representative of the insurer or an independent person employed by the insurer to assess and determine the extent of the insurer's liability for loss or damage claimed by the insurer.

# Loss Adjustment

Following a notification of a claim, the insurer must determine the extent to which loss has occurred and the amount which can be paid to the insured as indemnity. This process of gathering information and making a decision in relation to the policy is called "loss adjustment".

#### Loss Assessment

Loss assessment is the first stage of loss adjustment, i.e., estimating the loss suffered as a result of an insured peril.

### Loss Frequency

The rate of the occurrence of losses, often expressed in terms of the number of incidents over a period of time. It is one method used for measuring the effectiveness of loss prevention services.

### Loss Ratio

Loss ration = 
$$\frac{loss}{premium}$$
 x 100

The losses divided by the premium paid shown as a percentage. The numerator (losses) can be losses incurred or losses paid, and the denominator (premium) can be earned premiums on written premiums.

The loss ratio is usually expressed for the insurer's operations as a whole and/or by crop/risk/area. For example, an insurer may speak of a certain loss ratio for frost insurance in citrus orchards in XYZ state.

### Moral Hazard

The risk or danger to be looked for from human nature, both individual and collective. Moral hazard depends mainly on the character of the society, the character of the insured, and on the character of his employees and the manner in which they work and behave at work. Examples of poor moral hazards are carelessness, fraudulent claims, crime of arson, irresponsibility, gross over-insurance, general moral climate due to period of depression and recession and unreasonable demand of high

amount of claims settlement.

# Mutual Companies

Companies, in effect associations of policy-holders, who are themselves the proprietors of the undertaking and receive the full benefits of any profits made.

# Net Premium (pure premium)

The premium necessary to cover only anticipated losses, before loading to cover commission and other expenses.

# No Claim Discount (No Claim Bonus)

A reduction from the renewal premium in accordance with a specified scale allowed by insurers where no claim has been made or instituted under the policy for an agreed period.

# Non Proportional Reinsurance

A generic term describing all forms of reinsurance whereby the reinsurance contract is on different terms and conditions from the original contract and premium may not be divided between direct insurer and reinsurer in the same proportion as they pay claims. The method of rating for non-proportional reinsurance is on a "burning cost basis". Examples of non-proportional reinsurance are excess of loss reinsurance and stop loss reinsurance (excess of loss ratio).

#### Normal Yield

Is that yield which a number of years experience indicated can be expected from a particular plot under normal conditions, when no extraordinary natural disaster or unusual meteorological events occur. In practice the mode value of yield (the yield most commonly occurring) is taken as the normal yield. The mode is also the yield most commonly conceived by farmers as being acceptable, since they generally ignore bad years when estimating future yields on the basis of past performance.

# **Original Insurer** (or direct insurer or primary insurer)

Is the party to an insurance contract who underwrites and accepts the insurance business directly from the owner of the subject matter covered. In crop insurance the owner is usually the farmer and the original insurer is the party providing insurance coverage to him directly.

# Period of Insurance

Is the period of protection for which the policy is issued. Any losses taking place outside of this period are not indemnified. For annual crops the period of insurance normally commences at the time of sowing, sprouting blooming or transplanting and ends at the time of harvest. For perennial crops, for example, oil palm, the period of insurance may be on an annual basis.

# Physical Hazards

The risk or danger arising from the subject matter of insurance, example, excessive rainfall when the wheat is about to be harvested.

# Poisson Distribution

Is a kind of frequency distribution developed by a French mathematician, S.D. Poisson (1781 - 1840). The Poisson Distribution is the frequency distribution curve obtained when the chances of an event occurring are small. It is used for example in quality control statistics to count the number of defects of an item and in insurance to count the number of insurable losses.

## Potential Yield

Potential yield for a given crop/year is the yield which can be obtained if disasters do not occur in that particular year. It does not necessarily mean the highest yield per year ever achieved. The potential yield relates to a particular year. Loss adjustment under the potential yield approach usually requires determination of the percentage of damage. Potential yield is used, for example, in computing indemnities for wind damage in tree crops. In this case (and in most cases) the potential yield is considered as follows:

Potential yield: number of fruit dropped + number of fruit on tree.

Potential yield is applicable only to specific risks (g.v.) insurance. It cannot be used for all risk insurance because it is virtually impossible to determine percentages of damage separately caused by each hazard.

When the potential yield is used for calculating indemnities then it is the standard yield (g.v.).

# **Premium**

The monetary consideration payable by the insured to the insurers for the period (or term) of insurance granted by the policy.

#### **Premium Rate**

The price per unit of insurance. Normally expressed as a per cent or per mille of the sum insured.

Premium rate = <u>Premium (or gross premium)</u> x 100 Amount of insurance

Clearly the greater the risk of insured loss, the greater will be the premium rate.

### Primary Insurer

See "original insurer".

**Proportional Reinsurance** (participating reinsurance or pro-rata reinsurance)

A generic term describing all forms of reinsurance in which the reinsurer shares an agreed pro-rata portion of the losses and premiums of the ceding company. Examples of proportional reinsurance are surplus reinsurance and quota share reinsurance.

### Pure Premium

A term used in insurance rate making. It refers to that portion of the total premium which is needed to pay expected losses. It does not take into account money needed for other company expenses.

# **Quota Share**

Is a proportional type of reinsurance. The direct insurer arranges with the reinsurer to accept a fixed proportion of all his business of a certain class and the reinsurer accepts that proportion in return for a corresponding proportion of the premiums. The method is not greatly favoured because it means paying away a proportion of the premium income where the direct insurer might safely retain the whole of a risk. It is, however, a useful method for small offices or those starting up a new class of business where in the early days one or two heavy losses could swallow up all the income.

# Reinsurance

Is insurance taken out by a direct insurer from another insurer (termed the reinsurer), so as to share

and spread the risk(s) accepted under the original policy. The original risk(s) may be too great for the direct insurer to bear solely on his own account due to large exposure or accumulation.

### Retention

The amount of liability retained by the ceding company and not reinsured.

### Risk

Relates to an event which may or may not occur, the likelihood of which can be predicted with a certain degree of confidence.

# Single Channel Market Crop

An industrial crop with a single or limited number of possible market outlets, e.g., processing factories.

# Specific-risk Insurance

A policy which describes and pre-establishes specifically the named perils to be covered, in contrast to a policy that covers "all-risks" subject to certain exclusions.

#### Standard Yield

An average yield under given conditions.

# Subject Matter of Insurance

May be any property, rights, interest, life or limb, or potential liability devolving upon the insured capable of being covered.

# Sum Insured

The maximum monetary liability of the insurer to the insurer under a policy of insurance.

## Surplus

Is a proportional type of reinsurance. The direct insurer cedes to the reinsurer only those amounts which he does not wish to hold for its own account, i.e. those above his retention for a given policy or risk. The surplus reinsurance has a maximum capacity of a pre-agreed number of lines. Each line is equal to the direct insurer's retention. In accepting that proportion of the policy or risk, the reinsurer in return receives a corresponding proportion of the premium and pays the same proportion of any claim arising. Example of surplus reinsurance: if the surplus reinsurance is a five line reinsurance and the direct insurer's retention is \$25 000:

Original Sum Insured	Direct Insurer's Retention	Ceded to Treaty	Proportion to Treaty
US\$ 25 000	US\$ 25 000	NIL	NIL
US\$ 50 000	US\$ 25 000	US\$ 25 000	50%
US\$175 000	US\$ 25 000	US\$125 000*	71.4%

<sup>\*</sup> The balance of US\$25 000 would have to be reinsured facultatively or under a second surplus reinsurance.

### Treaty Reinsurance

Agreements in writing between a direct insurer and one or more reinsurers to accept cessions of

business, underwritten by the direct insurer, within pre-arranged limits.

The reinsurer(s) cannot refuse to accept any cession which falls within the terms of the treaty.

Summary of premiums due to reinsurers and claims due from them are given at periodic intervals.

# **Uncertainty**

Relates to an event which may or may not occur, the likelihood of the occurrence not being measurable (see "Risk").

# Voluntary Scheme

In agricultural insurance terms this means a scheme which farmers may or may not join according to their own free will. (See "Compulsory Scheme".)

# <u>Yield</u>

Is production per unit area. See also "Normal Yield", "Potential Yield" and "Standard Yield".