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RELATING TO WORLD FOOD SECURITY

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WAYS OF REGULATING THE EFFECTS ON COMMERCIAL MARKETS AND PRICES
OF NATIONAL STOCK POLICIES FORMULATED IN THE CONTEXT OF
WORLD FOOD SECURITY

by

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SUMMARY

Efforts should be made to minimize the effects on commercial markets and prices of national stock policies. As far as the required stockpiling is concerned, three categories of countries can be distinguished:

(a) countries where the production of grains is normally about equal to the domestic consumption; (b) countries which do not produce a sufficient quantity and thus depend on imports as well; (c) countries which produce more than they need for domestic consumption and therefore export grains. The three situations are examined with reference to the results of stockpiling in relation to commercial markets and prices.

When assessing the level of the required or desired stocks, it will have to be ensured that sufficient and appropriate storage capacity is available at suitable places. In addition, sufficient drying capacity should be available in countries where the moisture level in grains is too high for direct storage, in order to bring the moisture down to a level where long-term storage becomes possible. If sufficient storage capacity and/or drying capacity is not available, this should be extended.

Stockpiling can take place in three ways: (a) the government itself provides for the required stocks and owns them; (b) the government provides incentives for private concerns to purchase and carry the required stocks; (c) a combination of (a) and (b). Normally, the private trade of its own accord will not have sufficient incentive to carry stocks at a level which is desirable under special circumstances. Thus special conditions should be created by the government.

Grain purchases will take place at the time of the existence of surpluses in order to market these again at home or abroad when there is a shortage. Governments should devise the necessary measures in such a way that they disturb as little as possible the sale and purchase pattern of growers, traders, processors, etc., which has developed on the basis of a free market. Furthermore, the government should inform interested parties long beforehand if it intends to undertake certain action.

Measures to be taken in countries where normally the production of grains is about equal to the domestic consumption

It is assumed that the stocks are purchased out of grains of the domestic crop in a year in which the crop is above normal. In order not to disturb the market and price development on the home market, the government should participate as a normal buyer of grains and try to make purchases at the most favourable prices. The government may intervene by means of a broker or by holding a tender. Purchase of the required quantity should be spread over a long period in order to minimize undesired price disturbances.

If the government has purchased grains and does not have at its disposal storage capacity of its own, it will be necessary to try to reach an agreement with sellers to stockpile the grain in their silos. If this does not prove to be a success, efforts should be made to obtain the required storage room elsewhere, and in this connection preference must be given to storage room where grains can be conditioned.

If the trade retains ownership of stocks, the government may arrange so-called "storage contracts" with the trade, in which an agreement is reached between the government and the trade that for the desired quantity a storage payment is granted that makes it attractive for the holders of grains to keep the relevant stocks in warehouses/silos until a future date. However, if the government wants to have stocks always at its disposal, it will be necessary that in the storage contracts between the government and the holders of the grains a clause is included on the basis of which the government can always buy the grains at the current market price.

Under a system of storage contracts the trade and processing industry themselves have to finance the stocks. However, since the grain may remain in store for a considerable time before the government is willing to purchase at the market price, the trade and processing industry is running rather large price risks. In the first place, the government determines the time of purchase, which can be less favourable for the holder of the grain. In the second place, the price development during the period between the date of conclusion of the storage contract and the date of the actual purchase implies great unforeseen risks, in which inflationary trends play an important part.

If in the case of a crop failure or suchlike eventuality, the government has to supply grains from reserve stocks, the sale to trade/processors can take place through tenders or by means of auctions. At periodic intervals it can be determined what maximum quantities will be sold per tender or per auction. In allotting domestic supply, care must be taken not to disturb the domestic price level existing at that moment; in other words, it may only be allotted against prices that are within certain limits of the domestic price level.

Measures to be taken in countries which do not produce enough themselves and therefore also depend on imports

These countries will have to purchase their reserve stocks on the world market. In order not to disturb the world market prices in a tight market situation, purchases should be spread over a long period. The purchases should take place through normal trade channels. If a country purchases grain from an importer, it will be attractive under certain conditions to reach agreement with the seller to store the grain in his silo, since he will be able to keep the lots in good condition and to rotate these from time to time with newly imported quantities for the normal supply. In this case the government should pay the ruling tariffs for storage and keeping. If the government prefers not to be the owner of the grain, it could try to conclude storage contracts with the holders of imported grain with adjustment of the market price.

If the government, in the case of a shortage on the world market, has to sell grains from government storage on the home market, the sale to the trade/processors can take place by means of tenders or through auctions. Measures should be taken to prevent price disturbances from occurring on the home market because of sales from the stocks. In view of the fact that imported grains might be stored to a large extent in the importing ports, the selling prices should be based upon the condition "ex store", since the processors who have their residence further from the importing ports, under normal circumstances also have to pay for the freight from the harbour to the inland destination.

Measures to be taken in countries which produce more than they need for domestic consumption and therefore export grains

The internal measures which have to be taken in these countries for the purchase of the grain and for storage and sale, are in principle the same as those which apply in countries where the production is about equal to their domestic consumption or in countries which rely on imports.

Measures to be taken in relation to international events

If on the world market a tight supply situation occurs, as a result of which the importing countries have to break into their reserve stocks, the exporting countries should also take certain measures. On the one side the countries with a shortage will have to minimize their import requirements by making use of stocks built up earlier; on the other side, the exporting countries will have to release the largest possible quantity for export from their reserves, as a result of which the tensions between supply and demand are reduced as much as possible.

In view of the close link between the measures to be taken in importing, exporting, and also, to a certain extent, in normally self-supporting countries, it is important that in relation to the building up of reserves every decision to purchase on the world market, or to sell from the reserves for the home market, or to export to a certain country or certain countries, is taken after consultation with other interested countries. It would be desirable to have permanent access to relevant information in relation to this.

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FOREWORD

It may be presumed that in general the building up and respectively the sale of national stocks in a certain country can have a certain influence on the markets in other countries, in view of the often strong mutual connection of the markets of many countries. However, in preparing the present note concerning the development of the ways of regulating the effects on commercial markets and prices of national stock policies formulated in the context of world food security, the writer has tried to deviate from this subject as little as possible.

Keeping the above-mentioned objective in view, whereby the effects of the national stock policy and not of the international stock policy are involved, this paper has therefore not attempted to go exhaustively into the effects which national stock policies may have on the international trade and on world market prices. For the same reason the way in which the national governments concerned would have to coordinate their stock policies has not been worked out further. In this connection it may be pointed out that a possible application of the directions that have been indicated in the paper requires that a time-schedule and/or other criteria be determined, in which is defined when and at what speed the stocks should be built up and should be replenished again after sale. These criteria, however, will have to be applied with the necessary flexibility, taking into account possible specific circumstances in the country or countries concerned.

The writer has set himself certain restrictions on account of the fact that the view of a mainly importing country was requested.

Finally, it may be noted that attempts have been made to indicate schematic directives in the note, according to which - in the writer's opinion - the stock policy would have to be conducted. In view of the large variety of circumstances, which can differ strongly from country to country, a certain degree of flexibility in the possible application of the directives mentioned in the note must be possible. In particular, the authority that will be charged with the coordination of the national stock policy will have to pay due regard to the specific circumstances in the country concerned.

GENERAL REMARKS

1. In this section a number of general remarks will be made first before going into certain procedures to be followed in relation to the ways of regulating the effects on commercial markets and prices of national stock policies formulated in the context of world food security.

General

2. In general it can be stated that the building up of national stocks will involve certain consequences for commercial markets and price development.

3. In two cases, however, the consequences will be minimal:

- (a) If it relates to countries with planned economies and the government itself takes over home-grown grains and also purchases grains abroad.
- (b) If an importing country is able to conclude long-term bilateral trade contracts with exporting countries and, in the absence of (sufficient) storage capacity of its own, can agree that the purchased grains may remain in stock in the exporting country until a date to be fixed, possibly against payment of the storage costs. In case of a shortage, these grains can be shipped to the relevant country in good time. These contractual commitments are thus taken into account in the desired stock to be carried.

4. It should be realized, however, that in many countries a free market exists with one or other form of market organization, in which a prospect is held out to the growers that they will receive a certain minimum price, whereby the market develops by means of possible import levies and export restitutions insulated from developments on the world market. In these countries the building up of national reserve stocks may have its influence on national commercial markets and price development, so that efforts should be made to bring this influence down to the minimum.

5. Starting from the situation mentioned in para. 4, distinction can be made, as far as the required stockpiling is concerned, between three categories of countries:

- (a) countries where the production of grains is normally about equal to the domestic consumption;
- (b) countries which do not produce a sufficient quantity and thus depend on imports as well;
- (c) countries which produce more than they need for domestic consumption and therefore export grains.

6. The results of stockpiling in relation to the commercial markets and prices might differ in the situations mentioned under (a), (b) and (c). Therefore it seems necessary to examine the three categories mentioned in detail in order to determine whether different regulations are necessary and which should be preferred.

Sale of grains by producers to the trade/processors and prices on the domestic market

7. In order to promote a calm development of the market and prices on the domestic market, it may be considered desirable that measures are taken which encourage grain producers not to offer too much grain immediately after the harvest to the trade/processors but to spread the supply as much as possible over a longer period.

8. This can be realized, as has been done already in a number of countries, by holding out to the growers the prospect of raising the price each month by a certain amount (reports). This regulation, which is also applicable to the trade, creates in principle the possibility of passing on the costs of storage and financing of the grain to the subsequent trade links. The amount of this monthly increase may differ from country to country in proportion to the costs of storage and financing.

Storage capacity

9. When assessing the level of the required or desired stocks as mentioned in the first part of Topic 1 (Methods of assessing the desirable size of stocks for food security) it will have to be ensured that for these quantities sufficient and appropriate storage capacity is available at suitable places. It must be certain moreover that there is always sufficient room to stockpile grains of the new crop. In addition, sufficient drying capacity should be available in countries where the moisture level in grains is too high for direct storage, in order to bring the moisture down to a level where long-term storage becomes possible. If sufficient storage capacity and/or drying capacity is not available, this should be expanded, which can be done by:

- (a) the government itself building stores/silos, etc.;
- (b) the government giving money to private concerns (growers, traders, processors) in order to provide for the required additional capacity;
- (c) the government obliging private concerns to provide storage room/drying capacity at their own expense.

In the latter case the government of course should give special guarantees in which it is definitely laid down that this newly built storage capacity and/or drying capacity can be made profitable. This point seems among other things a subject for discussion under Topic 5 of the Expert Consultation, "Alternative means by which governments (not holding their own stocks) can encourage private stockholders to meet the official objectives of national stock policies".

Purchase and sale of grains by or on behalf of the government in general

10. Stockpiling can take place in three ways:

- (a) the government itself provides for the required stocks and has these in ownership;
- (b) the government provides incentives for private concerns to purchase and carry the required stocks;
- (c) a combination of (a) and (b).

11. Normally speaking the private trade of its own accord will not have sufficient incentive to carry stocks at a level which is desirable under special circumstances. Thus special conditions should be created by the government, as will be discussed under Topic 5 of the Expert Consultation, "Alternative means by which governments (not holding their own stocks) can encourage private stockholders to meet the official objectives of national stock policies".

12. IT CAN BE STATED THAT GRAIN PURCHASES WILL TAKE PLACE AT THE TIME OF THE EXISTENCE OF SURPLUSES TO A GREATER OR LESSER DEGREE IN ORDER TO MARKET THESE AGAIN AT HOME OR ABROAD WHEN THERE IS A CERTAIN SHORTAGE. IT IS EMPHASIZED THAT THE GOVERNMENTS SHOULD DEVISE THE NECESSARY MEASURES IN SUCH A WAY THAT THEY DISTURB AS LITTLE AS POSSIBLE THE SALE AND PURCHASE PATTERN OF GROWERS, TRADERS, PROCESSORS, ETC., WHICH HAS DEVELOPED ON THE BASIS OF A FREE MARKET; IN OTHER WORDS, THAT THE POSITIONS HELD BY THOSE CONCERNED ON THE BASIS OF FREE MARKET DEVELOPMENT ARE DISTURBED AS LITTLE AS POSSIBLE. FURTHERMORE, IT SHOULD BE REGARDED AS NECESSARY THAT THE GOVERNMENT INFORMS INTERESTED PARTIES WELL IN ADVANCE IF IT INTENDS TO UNDERTAKE CERTAIN ACTION, SO THAT THE TRADE/PROCESSING INDUSTRY CAN ADAPT ITSELF IN TIME TO THIS ACTION IN CONNECTION WITH THEIR PREVIOUSLY HELD POSITIONS.

13. Since the views of the Netherlands based on the experience of a main importing country have been requested, this starting point will always be taken into account in the course of further discussion of the subject in this paper.

MEASURES TO BE TAKEN IN COUNTRIES WHERE NORMALLY THE PRODUCTION OF GRAINS IS ABOUT EQUAL TO THE DOMESTIC CONSUMPTION

Purchase of grains

14. It is assumed that the stocks to be built up are purchased out of grains of the domestic crop in a year in which the crop is above normal. In order not to disturb the market and price development on the home market, the government should participate as a normal buyer of grains and try to make purchases at the most favourable prices. In this connection it may be desired, as often occurs in private trade, to make use of a broker through which the government operates on the home market as a normal purchaser of grain in competition with other purchasers of grain. Another possibility is that the government submits a tender. In countries that have an intervention system on the basis of a minimum price it may occur that at the time of a dull market grain is offered to the government for intervention purposes, and thus the building up of stocks takes place.

15. Purchase of the required quantity should be spread over a long period in order to minimize undesired price disturbances. If at one time too much is being purchased, the internal market will without motive show a hardening tendency with all the undesirable consequences for processors/consumers. They then have to pay higher prices without there being a sound and normal situation of supply and demand. If in a particular year the crop is extremely large, it may be important that purchases are made in the beginning of the crop year, so that subsequently a normal quantity is available for the market during the remainder of the crop year.

Storage and financing

(a) Grains owned by the government

16. If the government has purchased grains and does not have at its disposal storage capacity of its own, it will be necessary to try to reach an agreement with the sellers to stockpile the grain in their silos. If this does not prove to be a success, efforts should be made to obtain the required storage room elsewhere,

and in this connection preference must be given to storage room where grains can be conditioned. The ruling tariffs for receiving-charges into warehouse/silo, delivery-charges ex warehouse/silo and for storage and respectively the keeping in good condition of the grains must be agreed upon. It may be stated that, if storage takes place with third parties, it is desirable that the grains are conditioned by the trade/processing industry and that the government takes all further risks. The government should under no circumstances resort to higher payments in order to obtain storage room in times of scarcity. Also payment of other (higher) tariffs could cause difficulties to the normal private trade. It may indeed be desirable or necessary that the government guarantees the storage until a future date to be agreed upon.

17. A further possibility is that the government gives preference to the desired stocks remaining in the ownership of the trade. In this case it will be compelled to ensure sufficient incentive for this activity.

(b) Grains not owned by the government and the financing of these

18. In the situation indicated under para. 17, the government might arrange so-called "storage contracts" with the trade, in which an agreement is reached between the government and the trade that for the desired quantity a storage payment is granted that makes it attractive for the holders of grains to keep the relevant stocks in the warehouses/silos until a future date. In this payment an amount should be included for keeping the grains in good condition, or if necessary for rotating the grains, as well as a payment of interest. The government will have to check the existence of the stocks concerned regularly.

19. However, if the government always wants to have the stocks at its disposal it will be necessary that in the storage contracts between the government and the holders of the grains a clause is included, on the basis of which the government can always buy the grains at the current market price. A committee of arbitration should fix the current market value of the relevant lots on the day on which the storage contract is concluded. If in due course on the day of purchase by the government the market price is higher than the market price on the day of conclusion of the storage contract, the holder will have to sell the grain at the last-mentioned price, as a result of which he loses a certain profit. However, when the value on the day of purchase by the government is lower than that on the day of conclusion of the storage contract, then the seller has a certain advantage because he receives the higher price, which was the market value on the day of conclusion of the storage contract.

20. With the system of storage contracts mentioned above, trade and the processing industry themselves have to finance the stocks. However, since the grain can remain in store for a considerable time before the government is willing to purchase at the market price, trade and the processing industry are running rather large price risks. In the first place, the government determines the time of purchase, which can be less favourable for the holder of the grain. In the second place, the price development during the period between the date of conclusion of the storage contract and the date of the actual purchase implies great unforeseen risks, in which inflationary trends, occurring almost everywhere, play an important part. From circles of the Dutch trade and processing industry the view has come forward that they are not willing to conclude storage contracts as described. In order to avoid the risks mentioned, they will require the government to pay directly the price agreed upon. Since the government in this case becomes a direct owner of the grain, a situation of the kind already described occurs (see para. 16).

Technical aspects of the storage of grains

21. As far as the storage of grains is concerned, allowance should be made for the criteria that are applied in countries with a cold climate, a moderate climate, a sub-tropical or tropical climate. Furthermore, it makes quite a difference whether one wants to stock for one month or for several months or if one has in view a successful storage lasting several years. One will always have to consider three factors together: moisture level, storage temperature and storage time.
22. The grain, which must be of sound quality, has to be stored in proper, well-equipped stores. If large quantities have to be stored, depending among other things on the time of the (crop) year, storing in poorer accommodation than is used for normal commercial grain is inevitable. The possibility of fumigation is desirable either by gas or by tablets. Locations which are vulnerable to serious rodent attack must be rejected. With regard to the precautions to be taken against infestation before intake and during storage, it can be pointed out that usually the place must be proper and clean and free from grain dust at intake. The temperature of the grain may provide an indication of infestation. When the temperature inside the grain rises whereas outside it keeps steady or becomes lower, thorough investigation is necessary. Therefore the possibility of measuring the temperature of the grain must always be present or must be created.
23. In some countries in Western Europe grain is accepted at a maximum moisture content of 16 percent. As to storage, at first a difference is made between on the one hand wheat and barley and on the other rye, and secondly between silos without equipment for cooling and warehouses where grain can be cooled. The experience in the Netherlands is that wheat and barley with a moisture content of 14 percent can be safely stored in silos during the period from October till May. When it is expected that storage will last longer, that is to say also during summer-time, a lower moisture content, say 13 percent, is recommended. For rye, a moisture content is handled which is 1-2 percent lower than for barley and wheat. In warehouses with equipment for cooling, wheat, barley and rye with a moisture content of 16 percent can be safely stored during the period October till May. When it is necessary to store the grain for a longer period, drying down to 14 percent is recommended. With regard to live pests (including mites) there should be no tolerance, i.e. all grain must have no live pests (including mites) at any stage of development. In order to detect infestation during discharge, many small quantities of grain have to be sifted on hand-sieves of about 17 x 12 cm.
24. If the government has the grains stored with the seller or with other third parties, no matter whether the grains are owned by the government or not, a storage agreement should be made between the government and the stockholder in which warehouse rent and the terms on which the stockholder undertakes the responsibility to keep the grains in good condition are laid down.

Sale of grains

25. If in the case of a crop failure or a similar eventuality, the government has to supply grain from reserve stocks, the sale to trade/processors can take place through tenders or by means of auctions. At periodical intervals the maximum quantities which will be sold per tender or per auction can be determined. It is advisable to announce a considerable time beforehand on what dates and for what quantities tenders or auctions will be held. At the same time, notice should be given whether the grains are to be sold for domestic supply or are intended for export. In the conditions of tendering, the sort of grain and the quality involved, where the lots are stocked, and the terms of delivery and of acceptance should all be precisely indicated.

26. In allotting the domestic supply care must be taken not to disturb the domestic price level existing at that moment; in other words, it may only be allotted against prices that are within certain limits of the domestic price level. For countries that have an intervention regulation by which the government is bound to buy grains at a certain price level, it is recommended to include in the conditions of tendering the proviso that in any case the grains shall not be allotted at a price which is less than, for instance, 2 percent above the current intervention price.

27. If the government proceeds to selling grains for export, it may be necessary to lay down that the grain is only to be sold to a certain destination or destinations. In this situation the government will have to control that the grain is actually shipped to the destination(s) concerned and that it arrives there, and this should be proved by the party or parties concerned by means of a customs declaration, or a similar document, issued in the country of destination. In order to ensure this, the exporter would have to give an adequate guarantee, which would only be returned if it was proved that the grain had reached its approved destination.

28. If the grain is sold, a sound purchase/selling contract between the government and the buyer will have to be made, which clearly indicates the rights and obligations of both parties.

MEASURES TO BE TAKEN IN COUNTRIES WHICH DO NOT PRODUCE ENOUGH THEMSELVES AND THEREFORE ALSO DEPEND ON IMPORTS

Purchase of grains

29. These countries will have to purchase their reserve stocks on the world market. In order not to disturb world market prices too much in a tight market situation, it would be strongly advisable to spread purchases over a longer period. The purchases should take place through normal trade channels, with indication of the maximum quantity involved, the sort of grain, the time of delivery, as well as further relevant details.

30. If a country purchases grain from an importer, it will be attractive under certain conditions to reach agreement with the seller to store the grain in his silo, since he will be able to keep the lots in good condition without difficulty and to rotate these from time to time with newly imported quantities for the normal supply. Also in this case the government should pay the ruling tariffs for storage and keeping.

31. If the government prefers not to be the owner of the grain, it could try to conclude storage contracts with the holders of imported grain with adjustment of the market price. In this case such action will undoubtedly meet with the objections mentioned earlier (see para. 20).

Technical aspects of the storage of grains

32. Attention should be paid to the criteria mentioned earlier with respect to the storage of home-grown grains (see paras. 21-24).

Sale of grains

33. If the government, in the event of a shortage on the world market, has to sell grain from government storage on the home market, the sale to the trade/processors can take place by means of tenders or through auctions. In this case also, it is advisable that it should be periodically determined when tenders should be submitted or auctions held, as well as what maximum quantities should be allotted each time.

34. Measures should be taken to prevent price disturbances from occurring on the home market by sales from the stocks. Therefore sales should take place at prices that are within certain limits of the current internal price level.

35. In view of the fact that imported grains might be stored to a large extent in the importing ports, the selling prices should be based upon the condition "ex store", since the processors who have their residence further from the importing ports, under normal circumstances also have to pay for the freight from the harbour to the inland destination.

36. If the grain is sold, a sound purchase/selling contract between the government and the buyer will have to be made, clearly indicating the rights and obligations. In this case export should be excluded.

MEASURES TO BE TAKEN IN COUNTRIES WHICH PRODUCE MORE THAN THEY NEED FOR DOMESTIC CONSUMPTION AND THEREFORE EXPORT GRAINS

Purchase and sale of grains

37. The internal measures which have to be taken in these countries for the purchase of the grain and storage, as well as for the sale, are in principle the same as those which apply in countries where production is about equal to domestic consumption or in countries which rely on imports.

CHANGES IN THE SIZE OF THE RESERVE STOCKS

38. Since changes in production and in consumption can have consequences for the size of the reserve stocks, it has been indicated in three annexes in which cases these stocks can remain constant or have to be increased or can be decreased.

Annex A: In this annex the countries are indicated which do not produce enough and are therefore also dependent on imports.

Annex B: These are the countries where normally the grain production is about equal to their own requirements.

Annex C: Here the countries indicated are those which produce more than necessary for their own requirements and therefore export grain.

MEASURES TO BE TAKEN IN RELATION TO INTERNATIONAL EVENTS

39. If on the world market a tight supply situation occurs, as a result of which importing countries have to break into their reserve stocks, exporting countries should also take certain measures. On the one side the countries with a shortage will have to minimize their import requirements by making use of stocks built up earlier; on the other side the exporting countries will have to release the largest possible quantity for export from their reserves, as a result of which the tensions between supply and demand are reduced as much as possible. In this connection it may be observed that under those circumstances the private trade can normally continue practising its function. An embargo on the exportation of grains should not be applied, unless international rules provide for this, as countries which are normally committed to import would be especially hit by this.

40. If under the circumstances the prices on the world market rise to a very high level, it may be necessary under certain conditions to defend the domestic price level in the exporting country, so that this does not rise too high.
41. The measures in relation to export should, in case of necessity, be differentiated in such a way that exports to countries which are in urgent need of import grain can continue to take place under circumstances that are as normal as possible.
42. It is self-evident that the prices at which the government makes grain from the reserve stocks available for export, are determined in such a way that prices on the world market do not rise but that, on the contrary, a certain moderation is experienced.
43. In view of the close link between the measures to be taken in importing, exporting and also to a certain extent in normally self-supporting countries, it is important that in relation to the building up of reserves, every decision to purchase on the world market, or to sell from the reserves for the home market or to export to a certain country or certain countries, is taken after consultation with other interested countries.
44. In relation to this it would be desirable to have permanent access to information. A kind of consultation procedure could also be considered.
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ANNEX A

Country A has had an average grain production during the last 10 years of	...	700 000	tons
The average annual imports in that period amounted to	...	300 000	tons
<hr/>			
Average annual consumption	...	1 000 000	tons
Assuming that the reserve stock has to be 6 percent, then the size has to be	...	60 000	tons
<hr/> <hr/>			

Conclusions:

This stock of 60 000 tons will have to be imported gradually.

Furthermore, the following changes could possibly occur each year:

- (a) Domestic production and consumption remain constant.
The size of the reserve stock remains unchanged.
- (b) Domestic production remains the same and consumption increases.
The reserve stock must be increased accordingly.
- (c) Domestic production remains the same and consumption decreases.
The reserve stock can be reduced accordingly.
- (d) Domestic production decreases and consumption remains the same.
The reserve stock remains unchanged.
- (e) Domestic production increases and consumption remains the same.
The reserve stock remains unchanged.
- (f) Domestic production and consumption decrease.
The reserve stock can be reduced accordingly.
- (g) Domestic production rises and consumption grows.
The reserve stock must be increased accordingly.
- (h) Domestic production falls and consumption rises.
The reserve stock must be increased accordingly.
- (i) Domestic production increases and consumption decreases.
The reserve stock can be reduced accordingly.

The above-mentioned has been included in the following table:

ANNEX A (contd.)

	<u>Production</u>	<u>Consumption</u>	<u>Imports</u>	<u>Reserve stock</u>
(a)	Constant	Constant	Constant	Constant
(b)	Constant	Higher	Higher	Revising upwards
(c)	Constant	Lower	Lower/no	Revising downwards
(d)	Lower	Constant	Higher	Constant
(e)	Higher	Constant	Lower/no	Constant
(f)	Lower	Lower	Constant	Revising downwards
(g)	Higher	Higher	Constant	Revising upwards
(h)	Lower	Higher	Higher	Revising upwards
(i)	Higher	Lower	Lower/no	Revising downwards

ANNEX B

Country B has had an average grain production during the last 10 years of	...	1 000 000 tons
The average annual consumption in that period also amounted to	...	1 000 000 tons
Imports	...	Nil
Assuming that the reserve stock has to be 6 percent, then the size has to be	...	60 000 tons

Conclusion:

This stock of 60 000 tons will have to be built up gradually:

(a) from domestic production during years when the crop is larger than consumption

or

(b) from imports.

As for the annual changes, the reader is referred to points (a) through (i) in Annex A, which also apply here.

ANNEX C

Country C has an average grain production which every year is larger than the quantity required for domestic consumption.

In this case the reserve stock only has to be adjusted to domestic consumption.