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**Improving the Methodology for
Joint FAO/WFP Crop and Food Supply Assessment Missions
Estimating Commercial Imports**

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EXECUTIVE SUMMARY

The Methodological Guide currently used by GIEWS was written in 1996, and while it deals thoroughly with certain aspects of estimating the food balance sheet, certain other aspects have not been adequately addressed. One case in point is commercial imports. These are a major parameter in the food balance as events during the past few years have clearly shown. Informal commercial imports in particular require a thorough analysis. If they are not properly estimated, the balance sheet can be wrong, particularly because this parameter is potentially the one most variable one during the months covered by the mission.

This document is intended to fill these gaps. It is based on the study of documents and on previous practical experience in the field. Its aim is to provide Evaluation Missions with a fine-tuned tool that they can use to deal with increasingly complex food situations.

First of all it recalls the basic concepts of the food balance sheet, of which commercial imports are only one component. It shows the strengths and the weaknesses of this tool, and ways of improving it. It highlights the complexity of the interactions between balance sheet items.

It then examines possible ways of reducing the uncertainties when calculating the balance sheet, particularly with regard to the commercial imports component. Next, it deals with the various situations that exist in different countries regarding food security and commercial imports, and relates methodology and particular sets of circumstances.

The document provides examples with figures, and analyses two case studies of relevance for an understanding of commercial imports: Malawi and Niger. The final sections contains a series of notes on specific themes, together with practical advice and tables.

The proposed analysis is based on a number of truths which appear fundamental:

- Imports are a key element in the current year food balance sheet and partly determine average apparent consumption estimated on the basis of historical data. They therefore require the same attention as the other terms of the balance sheet equation, such as production, for example.
- International trade and consumption patterns are strongly influenced by the policies pursued, in a way that is not always intentional.
- The degree of interaction between the public sector and the private sector, and the far-reaching impact of government agrifood policies, particularly foreign trade, is recognised and explained.
- There is often a wide gap between the policies adopted and those actually implemented, which further illustrates the previous remark.
- Informal cross-border trade and its overall impact on the country's food balances are generally underestimated. Insufficient account is taken of the level of regional market integration, above all in the case of Africa.
- There are often multiple causes: an overall approach is therefore necessary, comprehensively incorporating the interactions between the different items on the food balance sheet. There is no such thing as commercial imports *per se*, but only in relation to a given environment.
- The purpose of the evaluation exercise is to achieve the best approximation possible, according to the available time and resources, but not to achieve absolute complete (and hence, illusory) certainty.
- While taking all the necessary precautions, particularly by checking and confirming the data, the representatives of the private sector are a primary source of knowledge and information. The missions must devote sufficient time to them once they are in the field.

1. THE FOOD BALANCE SHEET: TERMS OF THE BASIC EQUATION AND THEIR INTERACTIONS

The essential tool for measuring the food situation is the food balance sheet, which provides the figures for all the food balance components, including commercial imports, during the coming year in the country under examination.

THE ESSENTIALS OF THE FOOD BALANCE SHEET

Definition:

The food balance sheet provides an impartial measurement of a given country's global food situation during the coming year, referring to staple food commodities, mainly cereals. Its main purpose is to understand the role that commercial imports will play in meeting domestic requirements.

Its components:

Domestic supplies

- production
- change between opening and closing stocks during the year

Uses

- human consumption
- losses and seed
- feed and processing

Net import requirements (Net: less exports)

- government imports
- commercial imports
- strategic imports
- private sector (commercial imports by definition)
- food assistance
- needs not covered by any of these

A few objectives for calculation:

- *Avoid over- or under-estimating the future production* of cereals and other basic commodities such as cassava: take account of the second harvest, and the "short" rainy season (after the mission visit),
- *accurately estimate future imports*, through various channels (including cross-border informal trade and re-exports),
- *take account of the complex interactions* between the different balance sheet items, particularly those caused by predicted advance actions by stakeholders (e.g. expected large public procurement volumes could dissuade private importers),
- *predict the impact of policy measures on the markets*, considering the way they are actually applied in practice,
- *estimate the effective demand*, as the ultimate determinant of commercial imports,
- *analyse the regional-level food situation* and not only the country-level situation,
- complete this global approach to food security with a *fine-tuned vulnerability analysis* to accurately target urgent or chronic needs,
- the balance sheet must be *recalculated after every natural disaster or conflict* occurring during the coming year.

FOOD BALANCE SHEET		
	SUPPLIES	USES
	PRODUCTION	HUMAN CONSUMPTION
	NET STOCK CHANGES Strategic imports	
	GOVERNMENT IMPORTS	LOSSES AND SEED
	Government commercial imports	
	PRIVATE SECTOR COMMERCIAL IMPORTS	FEED AND PROCESSING
	FOOD ASSISTANCE (PLEDGES)	
	UNMET REQUIREMENTS	
NET IMPORT REQUIREMENTS		

The food balance sheet takes account of basic food commodities, that is to say cereals, plus mainly root crops and tubers, including cassava, but only in the countries where consumption levels are sufficiently high.

1.1 Domestic supplies

The first component of the balance sheet is the domestic food supply, namely, its production (cereals and other commodities) and the net change in stocks held in the country between the beginning and the end of the coming year (stock drawdowns less stock replenishments). For example, a country produces 100 units of maize and 70 units of sorghum and millet; the total cereals stocks stand at 15 at the beginning of the year and at 8 at the end. Production + net stocks = 177.

$$\rightarrow (100 + 70) + (15 - 8) = 177 = \text{Domestic supplies}$$

There is an important methodological point to be made about production estimates. Missions take place at the end of the main harvest. But in many countries, depending upon the rainfall régime ("short rainy season"), there is also a secondary harvest later in the course of the year, which makes a fairly sizeable contribution to a country's food supply, particularly during the inter-season period, which is crucial. The mission is only able to gather fragmentary information on this secondary harvest, because it has not yet occurred when the mission takes place. This introduces a major uncertainty into the calculation of the forecast food balance sheet as far as production is concerned. Obviously this secondary harvest figure can be predicted on the basis of prior year performance. But climatic changes can often swing widely from the average. Ideally speaking, the figures should be adjusted during the course of the year, when observations following the field mission suggest that this should be done.

1.2 "Utilization"

The second component comprises the uses (or "utilisations") which the country's supplies must be able to cover. The term "uses" actually means "requirements", because in this case food use is implicitly imperative - obviously in the case of human consumption - and is not merely an accounting concept which is, to some extent, "neutral".

The main use is *human consumption*, expressed in terms of the average apparent historical consumption of carbohydrates over the five previous years, using the figures recorded and updated by FAO. It is assumed – and this is why the consumption is apparent – that the inhabitants of a given country have consumed all available supplies of carbohydrates over the course of a year, as part of their overall diet.

Annual estimated food requirement: the share of carbohydrates

Per capita consumption levels are based on the assumption that the calorie intake comes mainly from carbohydrate-rich basic foodstuffs (cereals, rice, cassava, sweet potato, the latter two being their dry equivalent, etc). The remainder, in a much smaller proportion, of these calorie requirements, is met by other types of food, such as meat, fish, fruit, etc.

In Zambia, in 2003 the GIEWS report based its calculations on the assumption that, on average, the population acquired 62% of their calorie intake from carbohydrates.

It should be noted that foreign trade is mainly in high carbohydrate food commodities.

National production is also used for *seed* to be sown the following year, after deducting estimated losses, which will be caused during the various post-harvest phases. Lastly, some of the cereals and other basic foodstuffs are used for *livestock feed* (raw or processed) or for *processing* for non-feed purposes.

1.3 The difference between supplies and uses: net import requirements

The difference between supplies and uses is the *net import requirement*. It is "net" because it is deducted from the exports during the course of the crop year. These net import requirements are what the country needs to achieve the global food balance, *defined on the basis of historical consumption levels*. The starting assumption is to *maintain* the average levels established during the selected historical period (the five previous years, as we have just seen), on the assumption that they satisfactorily meet the country's *global* nutrition requirements, and that if they are applied the country will avoid an overall state of food insecurity, unless some serious emergency arises subsequently, which would naturally throw any forecast into disarray.



A PITFALL TO BE AVOIDED:
Overly mechanical forecasting based on so-called historical trends

There are therefore two fundamental and linked notions, as indicated in the 1996 FAO methodological guide:

- 1) the **need for imported food assistance**, defined as the "*minimum quantity of food imports in the form of aid provided by donors, in order to maintain the historical levels of national average per capita supplies*".
- 2) the **total food deficit**, which is the change from the previous magnitude composed of "commercial" import forecasts (plus, where appropriate, the needs which at the end of the mission do not appear to have been met).

→ The core idea is that any food shortfalls that cannot be met during the coming year from commercial imports are covered by international assistance

1.4 The different kinds of imports to meet requirements

Apart from the case of international food assistance (which is also, formally, "imported" food, in the sense

that it is not sourced in the country, as discussed below), imports in the proper sense of the term - that is to say, purchased imports - can be of various different kinds.

1.4.1 Government imports

First of all, there are the imports effected by the government, either directly or through government agencies. The State may have a monopoly over foreign trade (and even over domestic distribution), making it the sole importer (and distributor). It may also share this position as an importer with the private sector, in varying proportions. Government imports are *often strategically motivated*: to set up stocks to meet the country's needs in cases of crisis, stocks which are sold on cheaply, or even distributed free of charge to the needy. The government may also procure cereals from abroad for sale (on the domestic market or even for export) on a commercial basis. In this case, the government operates in total competition with the private sector.

Governments have two ways of procuring food from abroad. They may *purchase* imported food (either directly or, as is more often the case, through a process of adjudication), entailing budgetary expenditure. By definition this is the case with public sector commercial imports. But they can also rely on *food assistance* – either received directly by the government or handled by the NGOs: if it is done through NGOs, it will be at all events be cheaper than if paid for out of government funds – which is, in principle, a donation from other countries. It should be noted that as assistance is accounted for in the food budget, it actually refers to *pledges by donors*, and even commitment forecasts. The distinction between food assistance and purchased imports is essential.

We also note that there are *preferential terms and conditions*, particularly with regard to payment terms, grace period, prices, and lending rates, which can also make *purchased imports in principle more or less like donations, in which case they are presumed, at least partially, to produce the same economic effects as a donation* (for example, they may have a powerful impact on domestic price formation).

1.4.2 Formal and informal private sector imports

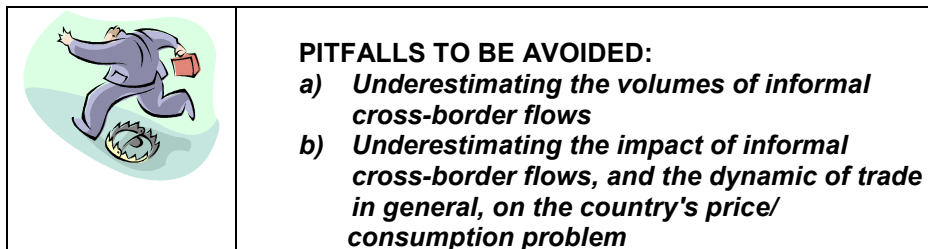
Private sector imports are a second type of commercial food imports. They fall into two subgroups: formal and informal.

Formal imports are based on the principle that the competent authorities record their characteristics: quantity, commodity type, mode of transport, date of arrival in the importing country, origin, price, etc. By being recorded they can be taxed, or be subject to quotas, or they can be checked to ensure compliance with any import ban that may have been decided by the authorities. But this registration is not always properly performed, and the recorded data is not always systematically and rapidly used or centralised afterwards. This can create a problem when calculating the food balance sheet. For there may be certain “grey areas” when accounting for these formal imports.

Conversely, *informal imports* are not recorded, and are therefore difficult to measure, unless some specific monitoring network has been put in place, which requires supplemental resources (at the end of this document is a note devoted to the WFP monitoring network in southern Africa). These imports are generally in smaller unit batches (one truckload, or even a few sacks carried by bicycle). And yet these informal flows are often quite substantial. They are also complex, and sometimes the flows are reversed between one season and the next.

The word “informal” must not be misunderstood, however, because this trade is often very highly organised, sometimes at the level of a whole region.

Furthermore, there is often an interplay between formal and informal imports. Formal commercial operations may also be based on an agreement between the parties involved in both sectors, and can even be carried through by one and the same formal importer, without this ever coming to light. The parties involved may achieve such technical mastery of the import trade, and may improve their access to bank credit in such a way that they can even join the formal sector, which is something they could not do when beginning operations. The *breakdown between the formal and informal import sectors is therefore in a state of flux*, and this influences the rationale of imports in general.



1.5 Import requirements and import capacity

The import capacity measures the quantities of basic foodstuffs the assumed capacity of government and the private sector to purchase from abroad for the following year. It does not necessarily coincide with import requirements.

1.5.1 The government's import capacity

In the case of the government, the import capacity will depend on the budgetary resources earmarked for the public procurement of basic foodstuffs, particularly imported food (it also purchases domestically-produced food). These resources depend on the government's budgetary priorities. These priorities can be a source of controversy, particularly with certain donors, who may feel that the government they are assisting is not making sufficient efforts to feed its people and thereby lighten the food assistance effort being made for the benefit of that country. The share of the budget spent on arms and the share spent on food are often seen as antinomic.

But public imports also depend on the *actual* resources available to the government. If the government is very poor, its import capacity will tend to be very limited, or perhaps even non-existent, whatever its budgetary priorities might be.

It should also be noted that budgetary priorities can be reflected in the possibilities that the government gives to the private sector to procure strong foreign exchange to purchase private sector imports. If the government monopolises the capacity to purchase foreign exchange to meet the needs that it judges to be priorities, there will not be sufficient foreign exchange to enable the private sector to import food (except by barter).

1.5.2 Commercial imports by the private sector depend on the effective demand

The private sector's import capacity can be assumed to exist when there is a certain level of real liberalisation in the country. This not only depends on private sector access to foreign exchange, but also on its *financing capacity*. In turn, its financing capacity depends above all on (1) its access to lending, (2) its reserves in cash and collaterals, and (3) the opportunities for bartering in the private sector's trade with neighbouring countries (for example, livestock for cereals). If foreign exchange is plentiful but the private operators are unable to finance themselves, the foreign exchange will remain unused by the private sector.

When private sector trade is based on barter or, for whatever reason, bartering is no longer possible, international trade between private sector traders is halted. For example, when livestock prices crash in country A it is difficult for the importers in that country to purchase the cereals produced in country B by exchanging them for the livestock produced in country A (which entails using the revenues from livestock sales, because this kind of "bartering" is carried out through a very temporary monetisation of the transactions).

But it is more often the case that finance can be found by the private operators *provided that there is an effective need to be met*, and on sufficiently remunerative terms. More specifically, this means an effective demand as this is perceived by these private importers, and one can assume that they are more often than not experts in detecting that demand.

1.5.3 A core parameter: effective demand

→ The principle here is that if there is no effective demand, that is to say, if the country is very poor, there cannot be any private sector commercial imports (apart from a few exceptions in the case of the tiny proportion of the high-earning population). Public imports for resale to domestic consumers may also be hard to dispose of, even if their prices are subsidised.

→ One may conclude that *the factors that determine the effective demand require very careful attention when calculating the food balance sheet and its commercial imports component.*

→ *There are a number of key questions to be put particularly to the traders: Which social groups can afford to purchase? In which regions of the country (in terms of the degree of integration between the regional market and the overall market)? What proportion remains in the towns and cities? Which products are in greatest demand there? Why import rather than trade in national products? Why is it that these social groups have cash reserves? What conditions are needed for this purchasing power to be maintained across the year, or beyond? What events might affect it? To what extent do formal imports and informal imports, respectively, meet these effective needs? What problems are raised by the coexistence of an effective demand and a demand that cannot be met? etc.*

1.6 **Accounting for the complexity of the relations between the balance sheet items**

These developments show, in general terms, that what might be called an accountant's approach to the food situation, in which the various items on the balance sheet are to a certain extent mutually independent of each other, is inadequate to account for the dynamic of food security. For this dynamic is complex.

1.6.1 Indirect determinants

This complexity very clearly emerges in the case of the indirect determinants of the effective demand, in terms of the general economic environment. For example, account must not only be taken of the cereals supply/demand. Consideration must also be given to the impact on cereals of the situation regarding other agricultural commodities.

For example, in some Sahelian countries many cotton producers also grow cereals. In 2004-2005, due to the rather high prices of cotton, the producers were often unable to refrain from selling their cereals harvests because they were less in need of liquid cash. Cereals prices were therefore quite high (because of a smaller market supply), and in some cases commercial imports were boosted into these countries, particularly from countries where the "cotton effect" was weak or non-existent. Conversely, a fall in cotton prices can lead to (1) a slump in cereals prices (producers sell more cereals because they derive a low income from cotton, with the result that the effective demand falls and cereals prices fall), and quite probably (2) the commercial imports they receive also fall (due to the reduced effective demand).

Another example of indirect influence: *the influence of commercial imports on the effective demand, of which they are therefore not purely and simply a reflection.* Commercial imports depend on the effective demand, but they can also reveal it or raise it. To a certain extent, the increase in commercial imports into a country lowers the prices of basic foodstuffs on the domestic market due to the increased supply. This rise in commercial imports can therefore make these commodities accessible to a small section of needy people who could previously not afford to buy them (conversely, the situation of other, even needier, people will not change, that is to say, their purchasing power remains zero despite the lower prices). This phenomenon has been shown, for example, in Bangladesh, particularly in the case of wheat. Obviously, beyond a certain limit, the lowering of prices by the influx of commercial imports might discourage domestic production and eventually increase food insecurity. This also depends on world commodity prices and exchange rates. According to this reasoning, there are three interacting variables: (1) production, (2) aid and assistance and (3) commercial imports, and not merely the latter two.

1.6.2 Reasons that are not always easily detectable

Another possible reason for the complexity might be the *real reason underlying the government's foreign*

trade policies. Moderately-priced exports, which increase the food deficit of the exporting country (and, conversely, meet the import requirements of another country) could really be intended as a means of procuring a strong foreign exchange in order to purchase certain non-farm goods from abroad. Unless this motivation is detected it is hard to understand the reasons for a country's food situation, such as, in this case, why the exporting country deprives itself of quantities of cereals which it needs itself in order to meet domestic consumption.

1.6.3 Many expectations and "games"

The complexity of the situation is also due to the *many expectations and "games" that drive the conduct of the parties concerned*, including the private sector importers. This concerns, primarily, interactions between the two "competing" components for the national food supplies, namely, food assistance and commercial imports.

A poor country with no budgetary resources, or which allocates its scarce budgetary resources to non-food priorities, will naturally aim at achieving the maximum dependence on food assistance, while reducing public commercial imports as much as possible. It will therefore "play" in this direction, considering that the situation has not been resolved and, for the following year, the breakdown between the two food sources has not yet been jointly agreed with the donors. Meanwhile, private operators will be in a state of uncertainty, and will act very cautiously (but, in the case of a poor country, with a weak effective demand and a poor commercial import capacity, the impact of the decisions taken by the private operators will at all events remain limited).

The private operators will hold out particularly high expectations, and be a state of great uncertainty if liberalisation has only been partially implemented, and both the government and the private sector are engaged in commercial imports on the basis of the assumed existence of an effective demand. In this case, the government has a great deal of power over setting import volumes, the terms and conditions applying to them, and particularly the import dates and deciding whether they will be sold on the domestic market or distributed for free or at subsidised prices. These measures have a powerful impact on the market, without requiring it to be accurately measured by the government's representatives. Since there is generally little or no coordination between governmental and private sector procurements, this could lead to a situation of general instability, which could seriously hamper the development of the private sector and its contribution to helping resolve the food problems.



A PITFALL TO BE AVOIDED:
Underestimating the importance of the interactions between the public sector and the private sector

1.6.4 The result: assessment missions bear a heavy responsibility

These various factors, the complexity, the many direct and indirect interactions between the components of the food balance, the expectations, the possible lack of coordination between all the parties concerned, etc will impact on the predictability of commercial imports and the actual levels they will reach by the end of the year to which the FAO forecasts apply. Furthermore, the analysis of the situation in the FAO/WFP report can be used by the main parties involved, so that each can act in their best interests or according to their own view of the problems.

The mission members therefore bear a heavy responsibility, and any major mistake on their part by underestimating or overestimating one or other balance sheet item will have major consequences.

A tension exists between the wishes of the donors, who expect the missions to make an "objective" appraisal of the country's import capacity to be used as the basis for establishing the dimensions of their assistance programmes on the one hand, and the inevitable uncertainties regarding the calculation of the food aid requirement, which can heighten the subjective nature of the results, on the other.

The governments of the recipient countries also play their own game. Among other things, because of an ignorance of the real market mechanisms, they might consider that a crisis caused by their own excessive imports of cereals has been due to a failure to properly estimate domestic output. For this underestimate made by the mission may only have played a partial or secondary role in triggering the crisis, and at all events have been difficult to avoid in view of the often rather unreliable data available for forecasting production.

Prior coordination between governments, donors, international institutions and private sector stakeholders is necessary to prevent the negative repercussions of this tension and maximise the positive effects by improving data collection methods. This requires closer cooperation and, as far as possible, improved surveying and investigation facilities.

These remarks show that *it is not always easy to identify the key for determining the breakdown between commercial imports and food assistance in fulfilling requirements. It is not the case, in particular, that when a key is selected, it is always able to produce feedback to the extent of x or y in respect of the complex interplay between the stakeholders in this breakdown.* To cite one example: if, from what has just been said, the data indicates the breakdown between commercial imports and food assistance to be 61/39 or 49/51 out of a total of 100, the consequences of any decisions that will be taken regarding imports and stocks may differ considerably. The knock-on effects of these decisions on subsequent market developments can also differ.

The neutral nature of establishing a breakdown key is an essential ethical rule. It is a datum which must be taken into account, although it is not always easy to do in view of the large number of determinants and "secondary effects". There are no absolute standards - except impartiality - but there are a large number of possible cases that may arise.

However, since all the interactions between food assistance and the market mentioned above certainly exist, even though they are therefore complex, one may draw a different conclusion: *one can, at least to a certain extent, use the markets as indicators to show the soundness of the full set of policy measures adopted and of food assistance.* This requires a sound understanding of everything that has to do with the operation of the markets. And that is where much of the complexity lies.

1.7 Summary of the basic concepts: a schematic example of a country's forecast cereals balance sheet in 2004/2005 (thousands of tonnes)

	Rice	Wheat	Other Cereals	Total
A. Population at 30/04/05				10 000 000
B. DOMESTIC SUPPLIES	720.0	780.0	300.0	1 800.0
B.1 Stock variation	+ 20.0	- 20.0	0.0	0.0
B.2 Gross production	700.0	800.0	300.0	1 800.0
C. USES	1 000.0	1 000.0	500.0	2 500.0
C.1 Human consumption	920.0	930.0	450.0	2 300.0
C.2 Losses and seed	80.0	70.0	50.0	200.0
D. NET IMPORT REQUIREMENTS	280.0	220.0	200.0	700.0
D.1 Forecast commercial imports	160.0	110.0	100.0	370.0
D.1.a – of which, public	60.0	50.0	10.0	120.0
D.1.b – of which, private	100.0	60.0	90.0	250.0
D.2 Food assistance	100.0	110.0	60.0	270.0
D.3 Unmet shortfall (on date of mission)	20.0	0.0	40.0	60.0

In this - deliberately simplified - example, using arbitrary figures, the country has a population of 10 million (A).

Per capita consumption totals 230 kg, made up of 92 kg of rice (namely, 920 000 tonnes – C.1, first column), 93 kg of wheat (namely, 930 000 tonnes, C.1, second column) and 45 kg of other cereals (namely, 450 000 tonnes, C.1, third column). These figures are based on the average of the five previous crop years, as indicated in the FAO data bank. Account has not been taken of root crops and tubers, and cassava in particular, whereas for another country this could and should be done.

Human consumption (C. 1, last column) accounts for a total of 2 300 000 tonnes, losses and seed (C. 2, last column) 200 000 tonnes, giving total uses (C, last column) of 2 500 000 tonnes.

For this country, the assumption is that no cereals are used for animal feed or processing.

Production (B. 2) according to these forecasts, is only 1 800 000 tonnes.

Stock variations (B. 1) are completely offset because they are inverse and of the same value (- 20.0 + 20.0, while "other cereals" stocks remain unchanged).

Domestic supplies (B, last column) therefore stand at 1 800 000 tonnes.

The total net import requirement (D, last column) is 700 000 tonnes. Exports have been deducted. For the sake of simplicity, the table does not show the calculation of this deduction.

It is assumed that this requirement will be met from commercial imports (D. 1, last column) of 370 000 tonnes, of which 120 000 tonnes will be government imports (D. 1.a, last column) and 250 000 tonnes private sector imports (D.1.b, last column) and partly from food assistance of 270 000 tonnes (D.2, last column).

The example proposed here shows that for all three categories of cereals considered the unmet requirements - at least on the date of the mission – was 60 000 tonnes (D.3, last column), which will certainly be the subject of debate with the donors.

1.8 Summary of the main strengths, weaknesses and possible improvements in the current food balance sheet methodology

Strengths

- A global approach must be taken to food security and not only a vulnerability analysis; the present food balance provides an essential conceptual and statistical framework for such a global approach; its formal presentation is necessarily a simplification.
- Judging from long past experience, this does provide an interesting approximation of the real food situation in the country, the best possible, although not one of absolute certainty.
- It clearly shows the determinants of production, because it is strongly focused on this aspect of the question (even though non-marketed subsistence agricultural production sometimes tends to be underestimated).
- It makes it possible to rationally use available statistical sources, particularly on "formal" imports.
- This being so, it takes the historical consumption levels as its benchmark, and in this regard, it can provide protection.
- It shows the country's food supply trends and identifies the breakdown of the diet (for example, the proportion of various cereals or other staple foods) and the changes affecting that composition.
- It measures the country's level of dependency on imported staple foods from abroad, which is an essential datum for food security.

A few weaknesses

- Although this approach is based on analysis of food security and commercial import policies, it is not


sufficiently comprehensive in this regard, particularly with regard to the impact of these policies on the markets.

- The analysis of the many interactions between its components must be further developed.
- Too little consideration is given to the private sector traders' analyses and the logistical and commercial problems of import channels.
- The impact of the market operations on food balances is inadequately addressed.
- It is based on available statistical data which are not necessarily very reliable, plus the fact that data creation is objectively limited by the lack of sufficient resources allocated to that task.
- The use of historical consumption figures does not, in itself, ensure consistency with stringent nutritional standards, which is a comparative weakness.
- The linkage between a global approach (the balance sheet approach) and vulnerability targeting needs to be spelled out.
- It is difficult to understand the possibilities of setting off surpluses against local deficits in the same country.
- The balance sheet does not distinguish between formal and informal imports and does not take account of regional market integration. The errors due to double accounting, for example re-exports, are often difficult to identify and can falsify the estimates.

Main improvements

- The analysis of the impact of policies on markets, particularly on commercial imports.
- Account is taken of the complexity of the interactions between the balance sheet items.
- Informal trade is being monitored.
- An understanding of root crop and tuber production.
- An understanding of distribution and marketing circuits.
- Regional market integration.
- The use of links and contacts in the countries in order to better prepare the missions.

1.9 The impact of policies on commercial imports: a number of issues requiring attention

	<p>PITFALLS TO BE AVOIDED:</p> <p>a) <i>Believing that stated policies are necessarily policies being implemented</i></p> <p>b) <i>Underestimating the impact of political decisions on the dynamics of trade, whether intended or not</i></p>
<ul style="list-style-type: none"> - <i>Measures regarding the foreign trade regime: taxes, quotas, the setting of taxes in terms of volumes imported or types of commodities crossing the border, can constitute a range including, for example, tax exemption for small batches. What are the tolerances in reality? Attention will be paid to the way these measures have been taken in the past and, according to the informants met by the mission, how they may be taken in the immediate future, during the next crop year. For example, is there a sharp difference between tax exemption (or the contrary) or is there a progressive tax regime? Are these measures the same for all, or are they part of a broader "policy mix"? Lastly, take account of the impact on the country of measures adopted in neighbouring countries (if these close the border, what are the consequences on the food vulnerability of the country being studied by the mission)?</i> - <i>The country's membership of a regional organisation, such as ECOWAS or a larger regional Organisation (WTO) and the consequences of this on the foreign trade regime. Draw up a list of recent measures adopted as a consequence of membership of these organisations, and analyse their impact on imports (and exports to countries in the same zone).</i> - <i>Monetary measures: exchange rates and exchange rate regime, the availability of strong currencies for financing commercial imports, exchange rates (in a particular maintaining high rates, which can excessively favour imports to the detriment of domestic production, as is the case in Angola with the repurchases by the government of large quantities of Kwanzas, the local currency, which has driven up the value of the currency). The impact of exchange rates will also depend on world basic commodity prices. This is partly dependent on the support given to the agriculture of the exporting countries. Establish the level of competitiveness of domestic production induced by exchange rates. Distinguish between the official exchange rate and the exchange rate practised on the black market.</i> 	

- *The government's attempts to use foreign trade to achieve particular objectives, which have nothing to do with the apparent commercial rationale.* They might intend, for example, to use exports or re-exports to procure otherwise unobtainable foreign exchange. It is necessary to understand the rationale behind this in order to explain the trading patterns.
- *Emergency measures to respond to climatic and other shocks*, and evaluating their possible impact on commercial imports.
- *Policies for the domestic and foreign marketing of basic foodstuffs* (regulating transport and effectively protecting transporters against predation attempts, the powers given to - and the actual conduct of - parastatals for storage and sale, particularly for strategic food security, marketing infrastructure, etc).
- *Transport infrastructure measures*, because the proper distribution of commercial imports, and food assistance and local production, depend on upgrading them.
- *Regulations affecting credit access by commercial importers*, and particularly the timely availability of bank loans, and the speed with which public and private stakeholders can become professionally qualified to deal with these issues.
- *The organisation of the markets in the country*: its history, problems, constraints (such as PRMC in Mali).
- *The distinction between the three levels of the impact analysis of government measures*:
 - o The texts of the measures, as set out in laws and regulations,
 - o The way in which these texts are actually implemented in the field,
 - o The intrinsic resistance of the environment, with its ethnic, geographical, social etc complexity against the provisions adopted to regulate it: find out, in particular, the inevitable ways in which these informal flows circumvent restrictive or punitive measures adopted at national borders.
- *The measures taken by the local authorities*, which may differ considerably from central tier policies (for example, the policies of provincial governors who may decide to place an embargo on cereals exports, or levy specific taxes on the movements of goods).
- *The general spirit governing relations between central government and the private sector*: depending on the country, these relations vary in their level of constructiveness. What is important is that the two sides should talk and make it a practice to work together, to ensure that ambiguities are removed and to enable them to move beyond a certain ideological dimension of the problems. This applies both to commercial imports and other sectors. Routine conflict in these relations makes it more difficult to solve the problems, particularly because it increases the risk of following unrealistic routes. What is the tradition of the country in this regard?

2. REDUCING UNCERTAINTY IN CALCULATING THE FOOD BALANCE SHEET

The main methodological problem is reducing uncertainty in the calculation of the food balance sheet items, as an instrument for measuring food security.

2.1 Modelling possibilities

One essential idea here is that it is necessary to have a realistic understanding of the possibilities opened up by mathematical modelling. The intrinsic interest of mathematical treatment of data is closely dependent upon its reliability and richness. Mathematical treatment is unable *per se* to up-grade unreliable and scarce data. While some improvements are possible through modelling, uncertainty can mainly be reduced by field work, i.e. by "sensing" the situation through first-hand information. Probing private traders is essential in this respect.

2.2 The difficulties entailed and the allocated resources

There is great tension between the difficulty in itself of calculating the balance sheet and the shortage of resources allocated to the investigations, compounded by the very high expectations of the various stakeholders, both domestic and international.

This tension can be creative, if it leads to improving evidently perfectible methods.

There are, however, negative as well as positive sides. This is the case when it leads to being excessively prescriptive about magnitudes, such as the "commercial import requirements". Such an exaggeration will

be due to forgetting that these magnitudes are necessarily only approximate and hypothetical, and are calculated at a given moment in the course of the season without being able to account for the impact of economic or climatic shocks, or any political measures adopted after the figures have been processed.

2.3 Arguments regarding "import requirements" and "import capacity".

As far as the goal is to reduce uncertainty, there may be also a *somewhat negative dimension in the controversies over the issue of import requirements/import capacity*. Determining import capacity relates to key policy problems that can be dealt with at the relevant – high – political level. Import capacity cannot be only related, or equated, with the strict, “absolute”, financial means that the State has as a result of its budgetary choices and the country’s balance of payment. While such parameters obviously will eventually play a major role in determining the country’s capacity to import, the game between the recipient State and donors may be quite subtle, thereby maintaining a high level of uncertainty. The recipient State will sometimes “sit on the fence” until the level of food aid is agreed by donors, in the hope that allocating hard currencies to commercial imports will be as light a burden as possible. For their part, donors will try to up the ante in accordance with what they consider as desirable objectives of food aid “versus” commercial imports.

Another problem in assessing a country’s import capacity is the fact that this country’s export earnings, whether actual or anticipated, do not necessarily “trickle down” to food importers, that is: do not obligatorily translate in some way or another into a financial capacity effectively put in their hands to carry out their activities. This may be related with the degree of transparency that characterizes the functioning of the country’s institutions in general. Such a transparency parameter should be fully considered when evaluating the food situation in a country.

2.4 Food security and vulnerability targeting

Reducing uncertainty regarding overall food security and the uncertainty of targeting vulnerable categories largely go hand-in-hand, since each one in isolation cannot offer an adequate degree of certainty.

For a given country, adding together the three sources of possible supplies - production, aid and commercial imports - is intended to fully cover the national basic foodstuff requirements. Any reliable forecast of these three elements will, in principle, make it possible to avoid both over-supplying and under-supplying the market.

However, *this quest to accurately meet requirements* can be seen in two different ways:

- *It may be "global", that is to say, it may refer to the whole population of a country, as a relevant "whole";*
- *It may relate to calculating and covering the requirements only of the sections of the population and/or regions which are really suffering from a food crisis, thereby assuming that the other categories and/or regions are above the food self-sufficiency threshold. The key notion here is therefore food vulnerability targeting.*

In theory, if requirements are perfectly targeted, food assistance should be limited merely to the amounts and other specifications that are strictly necessary to meet them, *in which case food assistance will no longer upset the food markets*. But while this is the theoretical reasoning behind it, the reality is far more complex.

In practice, indeed, partial substitution between food aid and other food most often takes place and multiple “grey zones” subsist. The child whose parents know that he or she will have school lunch will be given less food at home if the other children are fasting, with no prospect of school lunch for their part. In a similar fashion, the needy persons who receive food aid would in fact have eaten food had they not received it, even though this would likely have taken place in catastrophic conditions. A similar rationale may apply to the resale of food aid on the local market, a common phenomenon which, within certain limits, has sound reasons to exist and does not point per se to any illegitimacy or ill-calculation of food aid. It follows from such considerations that much can be gained in assessing the food situation in one country through an improved accuracy of food vulnerability assessment and mapping.

In short, the first - "global" – approach is the one adopted by FAO, while the second - "targeted" - approach is WFP's. There have been numerous debates for and against both approaches. That is not the position of this paper. We believe that they are two different, but complementary, approaches to analysing a country's food problems.

The most vulnerable people can be targeted without analysing the general environment, and in particular this requires an understanding of the way the markets operate. Food assistance cannot be completely isolated from the markets:

- either to determine the quantity of food assistance (a fall in cereals prices by opening up the national market to trade can improve access to food by the vulnerable population and thereby reduce the food assistance requirement).
- or to measure the effects that this might have ("too much" food assistance interferes with the formation of prices on the national market).

It is equally evident that it is an illusion to imagine that a country can be considered as a kind of large perfectly homogeneous "whole", inside which food of whatever kind and from whatever source would be distributed in a perfectly uniform fashion, whatever be the regions and sections of the population.

A country is certainly a relevant entity because it is a sovereign state, and as such it has its own statistics, which can be taken as starting data.

This does not rule out the need for prudence. Numerous examples show that a country which is supposed to be globally self-sufficient in cereals or other basic foodstuffs, and even have a surplus, may eventually fall prey to a serious food crisis, even in the short term. This situation may be due to mistakes made both in the "global" approach or in the "targeted" approach. One example of this was the joint effects of drought and locust infestations in the Sahel in 2004-2005, which did not appear to have created a global cereals deficit in certain countries, such as Burkina Faso. Yet the food crisis was very serious in some regions (in Burkina Faso, in the North and Sahel regions in particular).

Furthermore, some countries are extremely fragmented because of internal conflicts or because of their geographic or historical features. Some of the regions which they comprise are highly integrated with the neighbouring regions of bordering countries in many respects. Conversely, they may be poorly integrated with their national regional capital, or with other regions located on the other side of the country. The approach to food security for such fragmented countries raises specific problems.

Accessibility and availability of supplies, including imports: the importance of targeting and marketing

It is the problems of accessibility to commodities, rather than their availability, that is becoming increasingly more important in relation to the food situation of assistance-receiving countries. The supply exists, but the consumers have little or difficult access to it, for physical, commercial or economic reasons. Donors are therefore increasingly insisting on assistance targeting and aid distribution.

Hence the need to identify the logistical or commercial obstacles which slow down, or prevent, the distribution of food to the consumers. It is therefore useful to have a complete picture of the country's food distribution system as a means of measuring the impediments to distributing food properly.

This question also relates to commercial imports. Commercial imports are naturally intended to meet the effective consumer demand, which is only one part of the accessibility issue. Unmet consumption is amenable to assistance, particularly emergency assistance, which can be channelled through the humanitarian organisations without passing through the usual food circuits. But considering the many interactions that exist between commercial imports and food assistance, knowing what it is that restricts the accessibility of one particular form of assistance can help to explain the problems of accessibility to the other.

It should be noted that one possible obstacle that the mission's investigations may encounter is that the field visits mainly take place in areas where climate problems have caused the most serious damage. But these zones are not necessarily the ones in which the most serious marketing and vulnerability difficulties exist. Consequently, there is a risk of missing some elements needed to understand accessibility issues in relation to both domestic production and commercial imports. An attempt must therefore be made to acquire an overall view of the situation in the various regions.

2.5 Take an overall view, covering many different aspects

This approach to reducing uncertainty is also intended to meet a double need, which might to be taken as a challenge: it is essential *both* to go into the "technical" details, such as establishing exactly how to prevent double-accounting when calculating commercial imports and re-exports, *and* never to lose a holistic view of the problems.

The reason for requiring this overall ("holistic") picture is that errors do not normally exist in only one of the components forming part of the calculation of a country's food balance sheet. These errors can creep into several of the components, or even all of them at the same time, compounding the others rather than offsetting them. By definition, the equation depends on all its terms.

Consequently, improving the reliability of the commercial imports data is certainly a major step forward, but in itself is by no means sufficient. This exercise, devoted to commercial imports, is therefore sound in that it is only partially meaningful in terms of the progress made in areas other than merely knowing the imports.

Here are a few examples in support of this obligation to broaden the argument, and not to concentrate solely on commercial imports in the strict sense of the term.

2.5.1 Uncertainties regarding consumption levels

The per capita consumption figures used can vary enormously between one country and another neighbouring country, and can therefore look rather arbitrary to some observers.

Since, in addition, they are intended to achieve a purpose (to meet the population's food requirements) they can become more or less irreducible in principle, and the only adjustment variable would therefore be "unmet needs", which is, to say the least, a relevant expression. It is therefore possible to continue for a long time with a theoretical level of consumption far above the real level (assuming, moreover, that real consumption takes account of non-marketed subsistence production, because this is where another factor of uncertainty can be found).

This situation can entail a danger, even though this danger is highly theoretical. When one finds a large and recurrent deviation throughout a given historical period between imports and assistance on the one hand, and available supplies which the level of consumption defined for the country requires, on the other, there is a temptation to act, somewhat tardily, to ensure pure statistical accuracy *by adjusting the consumption levels downwards*.

In this particular case, it is a negative deviation in the sense that actual imports and (also actual) food assistance play too small a part in meeting the desired consumption levels. What is involved here is the "apparent" human consumption, that is to say, consumption which takes up *all the theoretically available supplies* (see the balance sheet above: theoretical supplies [that is to say, the predicted requirement to maintain the human consumption level] = production + net stock variations + net import requirements - losses, seed, processing and livestock consumption). If assistance or imports fall, the apparent consumption predicted for the coming year also falls.

The risk here is that, because of the inability to maintain high standards, the statistics may so to say "ratify" an unsatisfactory food situation, that is to say, a situation which is inconsistent with a level of consumption deemed to be normal.

The practical conclusion to be drawn from these comments is that any possible correction made to consumption levels used for calculating the food balance sheets must be done discerningly, however peculiar they may seem in some cases. Care should be taken that reforming the methodology to calculate import needs derived from consumption levels does not result to, so to say, inadvertently, in increased food vulnerability. If, for example, the historical per capita consumption level for a particular country is 250 kg of maize by taking account of requirements, but that actual imports have not actually achieved that level, the later years' level can be lowered to 200 kg in order to make import requirements match actual imports. Yet that 200 kg level is certainly highly inadequate.

A schematic example of "downward adjustment" of apparent consumption (in 2001) caused by a persistent unmet import requirement (kg/per capita/per year equivalent)

	1998	1999	2000	2001
Total apparent consumption	250	250	250	200
Of which net import needs	100	100	100	50
Of which actual imports	50	50	50	50

There is also another reason for caution estimating consumption levels: the levels used for one country might conceal a particular food vulnerability caused by the fact that the imports that are used in the calculations to normally cover the country's food requirements are *in fact only the formal imports*. In a year in which, for one reason or another, there is a steep decline in the informal imports - which also account for a substantial proportion of this coverage, but go unrecorded - the food balances maintained until then may be upset, without being statistically evidenced.

If, for example, the share of formal and informal imports are 75% and 25%, respectively, for a per capita import requirement of 100 kg, and if the 25% is not included in the calculation of the food balance sheet, a serious vulnerability problem will arise when the (actual) informal imports fall from 25% to 10%. This problem will be all the more serious if it is accompanied, as it probably will be, by a simultaneous decline in the total effective tonnes of imports. Instead of covering the aforementioned 100 kg level, they will only reach 80 kg.

Reduction in requirements coverage following a slump in informal imports needs (kg/per capita/per year)

	Year A	Year B
Formal imports	75	72
Informal imports	25	8
Total imports	100	80

As a conclusion, however, the consumption levels used for calculating food balance sheets, despite their apparently arbitrary character, are the basis on which to reason. They are certainly not a perfect tool for measurement. The fact that they are drawn up on the basis of historical series (the previous five years) is not in itself a guarantee that they are reliable. But they do make it possible to perform a useful and necessary approximation by crosschecking them against other information such as data on the operation of the markets.

2.5.2 Reducing the doubts about root crop and tuber production

Estimates of root crop and tuber production, particularly cassava (or of such fruits as bananas) is often uncertain from a methodological point of view, even though these commodities are often put forward as an major alternative to basic grains, and form the object of major development projects. The fact that these projects are sometimes recent ones, and the fact that they are often on a massive scale, can at least temporarily aggravate the impact of these methodological uncertainties (see the specific note on this point in the end of the document).

2.5.3 How reliable are production statistics in general?

General production statistics of the kind supplied by the national authorities often raise reliability problems, notably because of the lack of means for processing or checking them. There is often a certain reluctance on the part of these Authorities to measure the full impact on production of such disasters as drought or

locust infestations, which may be due in particular to the difficulties of getting "bad news" up to the top through a series of administrative tiers. Donors may also suffer from reluctance of this kind.

2.5.4 Stock estimates

The quantities of stored cereals are not always easy to measure, and the conditions under which they are sold or made available to national consumers are not easily known. And yet these stocks are an important component of the food balance sheet (see the note on this subject at the end of the document).

2.5.5 Understanding the functioning of the market and its impact on the food situation

While the emphasis has just been placed on consumption or production-related bias, one definitely key objective is to better understand how the market functions, notably by adopting an analysis that is not excessively focused on the production side, or on the mere quantification of imports from available secondary sources.

The assumption here is that *the way the import process is effectuated deeply influences the characteristics of the imported food*, e.g.:

- its effective availability,
- its specific geographical (sub-national) or social distribution, especially as a consequence of the price of imported staples versus consumers' solvency,
- the capillarity or the absence of capillarity which characterizes its distribution to end-users (i.e. consumers): can imported food reach, for example, villagers in remote locations?
- the question whether it displaces – or is displaced by – other sources of food, and competes with domestic production thereby reducing producers' incomes and incentives,
- its contribution to solving the food deficit, particularly in situations of emergencies,
- the degree to which it satisfies consumer preferences, its price elasticity relative to foodstuffs of other origins, etc.

2.5.6 The need for a regional approach

When discussing food balance sheets it is not possible to reason only in respect of a single country, because intraregional trade flows have a very powerful influence on domestic supply and demand.

This close regional market integration, and hence the extremely important role played by intra-regional imports and exports in terms of a country's food situation, is a very old factor in many cases. For example, even before the First World War, reports by the French colonial administration in West Africa laid stress on trade (in livestock, cereals etc) between different territories under one and the same jurisdiction, which itself was extremely vast.

At the present time, a political measure adopted by one country in relation to food, and the reactions to which it can give rise, can only be understood in terms of its region-wide resonance.

This means that, in a "passive" version, a country depends on what happens around it in neighbouring countries, and that, from a more "active" point of view, the same country influences the other countries or will necessarily be affected at home by the repercussions on its neighbouring countries of the decisions it had taken originally.

The problem is that food balance sheet missions have often been obliged to limit their investigations to a single country and not take account of events that occur in bordering or neighbouring countries, except to a very unsatisfactory degree, and even marginally, and all events with delays and surprises.

3. DEALING WITH ALL DIFFERENT COUNTRY CASES

3.1 Great differences between countries

Food balance sheet evaluation missions face a very marked variety of different factors which more or less

directly determine food security and measure it. For example:

- *geography*: the countries needing food aid to meet their emergency requirements are scattered over vast continents, and are extremely numerous;
- *access to the sea*: many of them are landlocked and are therefore highly dependent on their neighbours for supplies from outside; at the other extreme are the island states, with all the problems raised by insularity from the point of view of both production and supplies;
- *size*: countries vary enormously in size, as does the role of foreign trade in supplying domestic markets;
- *level of fragmentation*: some countries are highly fragmented from the point of view of food. Sudan is a case in point. This fragmentation is not the only factor to be taken into account in global geographic terms, but it must also be seen from a local point of view: a poor road system can make this fragmentation even more widespread. Villages without physical markets can therefore experience great difficulties both in selling their commodities and in receiving products from elsewhere, even if the region is well served as a whole;
- *policies*: the local regimes may have retained a monopoly over agricultural production and trading (and hence over commercial imports), but the vast majority of countries have liberalised their economies. Other countries deregulated trade a long time ago, such they are open to commercial imports. Types of policies may also differ: some countries have a scale of gradual measures regarding imports, or use "policy mixes", while others have less nuanced policies, and impose a narrow range of measures.

Security stocks policy, while legitimate in principle, is not always transparent enough for the traders' tastes, and this could be a factor that makes their activities less secure. It can also cause a slowdown in their operations, because the adjudication procedures take too long. The government may have a poor perception of market trends, and therefore act inappropriately, triggering a crisis from which it will subsequently suffer if it sells at a loss the stocks it had considered a good idea to build up, but which will also affect all the parties involved because this creates a general negative situation;

- *level of real liberalisation*: however, the level of liberalisation varies considerably. One of the variation factors is the transparency of the transactions and government intervention procedures. This transparency is more or less real, depending on the country concerned, and to certain extent it is independent of the legislative and regulatory framework adopted. Some countries also have a "hybrid" system, in which the government is responsible for checking the rules of the game while intervening heavily in the market. This "mixture" can be very destabilising to the private sector, as has already been emphasised;
- *the degree of food vulnerability*: this concerns the proportion of the population deemed to be vulnerable, the frequency of the crises, their geographic spread within the country etc;
- *the reliability of national statistics*: the quality of the data processed by the national government varies widely. The food balance sheet evaluation mission has to rely on these figures because they are official, and yet at the same time it must remain independently-minded with regard to this source of information.

3.2 A typology derived from different cases

To certain extent, this diversity of factors that influence the national food situation complicates the identification of a typology which can take account of the extent to which commercial imports supply the markets and make up the shortfalls. Here we shall just mention two situations in terms of the type of survey to be carried out.

3.2.1 Countries whose government monopolises trade are obviously a clearly-defined case, and perpetuate a model that used to be quite common in the past, in which the government is supposed to take care of everything.

This used to "simplify" the work of the missions up to a point, because they only had one single opposite number to consult.

This "simplicity" was also due to the fact that even when the government did not monopolise trade and the means of production, it was nevertheless the party that guaranteed the "monetisation" of the planned aid as a matter of priority, or entirely, and earned revenues from this "monetisation". There was therefore only one single channel through which the planned assistance could pass.

Furthermore, another "simplicity" factor was that this type of assistance was often the main, or even the sole, component of food assistance, and was supposed to be solely for the benefit of small farmers. Vulnerability in urban areas was excluded from the scheme because the main purpose of this assistance was to support agricultural production. In reality, however, food assistance was also widely used to help meet the food demand in the towns, where the politically sensitive sections of the population were concentrated, physically close to the seat of power, which the authorities wished to "coddle" frequently in a spirit of patronage. The role of political ratio in fulfilling food needs, including through some kind or other of imports, must not be ignored in many cases. Any government will probably find a way to cover the needs of its political support groups.

The situation became more complex with liberalisation and the increasing recognition of the role of the private sector and the market in relation to food vulnerability. There was no longer any one single party involved, but numerous parties, whose coordinating could pose problems. The full range of market mechanisms that had hitherto been contained in formal patterns, pushed their way to centre stage.

Furthermore, the programmed assistance and therefore the normal way of achieving it - through "monetisation" - gradually lost ground because of the growing importance, and subsequently dominance, of emergency food assistance. There was increasing criticism of the use of food aid as a means of disposing of accumulated surpluses mainly because of agricultural subsidies in the leading producer countries, and of its destabilising effects on the markets in the assisted countries. This gave greater legitimacy to *commercial* imports paid for by the recipients.

Criticisms have also been levelled against the question of different countries' "import capacity", the idea being that budgetary choices *should* reflect the will to feed the people, which presupposes, for example, that military expenditure should be limited and that enough money should be retained to buy basic foodstuffs from abroad.

The "prescriptive" analysis therefore gained ground with regard both to the legitimacy of food assistance and the question of how widely countries should open up to commercial imports. This did not necessarily mean that knowing the many facets of commercial imports would proceed as fast as the attention being shown to it.

3.2.2 Another fairly typical case, which has attracted attention for several years in relation to food assistance: the African countries

There are two types of situation here:

- certain countries in *southern Africa*: the combination of (1) partial liberalisation, as mentioned above, and (2) large volumes of intra-regional trade in basic foodstuffs, such as maize, which are poorly recorded and poorly known, varying in intensity and direction, (3) political measures seriously hampering food production levels and (4) serious climatic problems, have raised particular problems with regard to estimating the food balance sheet of the countries concerned.
- *West Africa*: almost simultaneously, there have been climatic shocks (drought), locust infestations and national policies that have had a profound impact on the regional basic foodstuffs market, which had formerly been integrated (particularly measures taken by Nigeria to promote national

output, especially of poultry: see the box at end of this paper), which provoked or aggravated a serious region-wide food crisis. It demonstrated the regional dimension of this crisis, and hence the fundamental methodological limitations of the "country-by-country" approach. This must also be reflected in the food balance sheet methodology.

Conflicts and disasters: how far do they interact with commercial imports?

The increasing frequency of food emergencies due to conflicts or disasters makes the situation even more difficult to analyse. Since all the components of the food balance sheet interact in many different ways, we must be able to *fully understand the consequences of emergency food aid on the general operation of the markets*, and in particular on commercial imports. For example, it is useful to know whether massive emergency food assistance is likely to "pull the plug" on the usual import circuits. In this case, it may be difficult to resume commercial imports once the emergency food assistance has been absorbed.

There is also the reverse question: in the case of a climatic shock or conflict, what might commercial imports contribute to emergency food requirements? This question is relevant, primarily because there remains an effective demand even in the event of such shocks. Commercial imports can subsequently help to meet emergency requirements if it is decided to distribute cash rather than food. The question is knowing how far this contribution can go is nevertheless a particularly difficult exercise because of the different situations existing between one country and another.

The Malawi case: intra-regional commercial imports and food security

Malawi is suffering from a food deficit, and needs to import quantities that vary from one year to the next, sometimes quite substantially, especially of maize. Much of the effective demand is traditionally met through cross-border informal trade.

The part played by informal trade depends heavily on the local currency exchange rate and the effect on domestic prices of government intervention on the cereals market. The sale of strategic stocks below the market price by intervention agencies replaces private sector trade not only in terms of tonnage but even more insidiously perhaps, of the effect on private traders in terms of dissuading them and reducing their sense of security.

One of the latent pitfalls in a situation of this kind (which became more evident recently) is the tendency to overestimate the tonnages required. This is normally put down to an unsatisfactory targeting of the requirements of the population in need of intervention measures, as well as an inadequate understanding of the way the market operates by the authorities that decide on those measures.

The uncertainties of the domestic production estimates for the coming year, referring to cereals or root crops and tubers, can also have a "concertina effect" on the supply and demand described above. The same applies to the essentially evolving nature of the pattern of intra-regional trade, even when the flows are reversed in some cases.

All these elements suggest that the public sector and the private sector, and indeed the donors, have all to gain if they have a full understanding of the way the markets operate, particularly the commercial imports markets.

4. SPECIFIC NOTES

4.1. Insertion of commercial imports in the country's marketing chain: main question to be tackled.

→ Please consult the three diagrams after this box to illustrate the analysis.

- Who effectuates the various functions, either *physical* (ex. transport, handling, storage) or *commercial*, i.e. immaterial (ex. searching for suppliers or clients, taking on price instability, dealing with the uncertainty in governmental decisions that impact on trade of cereals, etc.) involved in the import process? What is the role of the State in this respect, especially through its parastatals?
- Try and depict a general picture of the value chain for commercial imports (see diagram on the various players in the value chain). Pinpoint the main evolutions of the trading patterns, bearing in mind that each of the above functions has a cost: hence, when it is transferred from one player to another one in the chain it usually means that it will be exerted at a lesser cost. For this reason, by-passing middlemen of any kind is feasible only provided that their functions be performed more efficiently than in the current distribution patterns. Suppressing middlemen does not necessarily result in decreasing transaction costs. Middlemen have strong reasons to exist, *inter alia* in the import marketing channels. An approach based on marketing should consider all the complexity of intermediation in the chain and should identify all its successive links (or "layers") and the changes it undergoes.
- To what extent imports correspond to re-exports, either already so in the country of origin or in view of the fact that they will be destined to third countries? The more regional integration is effective, the more relevant this question is. It is also especially relevant in the case of landlocked countries (many countries are landlocked in Africa).
- How can commercial imports respond to shocks, how are they affected by policy response to shocks?
- Are importers combining import with other functions, such as export, wholesaling, storage, or retailing of domestically produced foodstuffs?
- Who dominates in the import marketing chain? Who provides credit, to whom? Is the import marketing chain characterized by a "cascade" financial dependency, i.e. where each layer depends on the credit granted by the layer immediately upstream? Are large firms occupying a position of monopoly or oligopoly? Are some local importers in fact subsidiaries of international trading companies? Are small importers emerging and to what extent? Can a process of capacity building (expertise in trading operations, including storage, credit, access to information) be detected amongst importers, especially the small ones, how fast is it working and how likely will it improve the functioning of the import marketing chain in future?
- Do importers have access to bank credit, and if so which financial instruments do they resort to (ex. collaterals)? What are the constraints in obtaining hard currencies to purchase imported goods?
- Identification of the major hubs in the marketing chain (ex. wholesale markets, ports, etc.) and of the zones they respectively serve (see diagram 1). To which degree are imports hubs specific compared to hubs through which domestic produced foodstuffs transit?
- Where are major logistic bottlenecks located in the marketing chain (see diagram 2)? Are some regions beyond the reach of imported grains or rice (in particular compared with domestic foodstuffs)? Try and indicate how different the degree of relevance of such question is depending on the origin of imports and the kind of foodstuff concerned, and on whether imports are formal or informal? What is the condition of the road network region-wise and how does this parameter affects the in-country distribution of imported foodstuffs? How efficient is for imported foodstuffs the retailing network, in the downstream segment of the chain? These issues closely determine food vulnerability in the various parts of the country (not only in the capital and main cities). What

matters is not only commercial imports as they enter the port or large in-country hubs but what happens in the subsequent phases, until they reach the end-users, i.e. consumers.

- In connection with the preceding question: when there is a conflict situation in the country, has a predatory “war economy” emerged and, if so, how does it impact the general level of commercial imports and the marketing channels through which they are distributed? Has war or conflict fragmented the country in terms of access to commercial imports (for instance, such fragmentation may be under the form of the capital and the zone around - It being the sole part of the country where commercial imports can be received)?
- What is (are) the existing market information system(s) in the country? How efficiently and accurately do they cover the specific issues of commercial imports? To which extent do they allow to gauge food vulnerability? To what extent do they reveal food shortages (and track their causes), as well as the impact of government policies on imported flows? Accordingly, to what extent can they be used to discuss food policy issues with the Authorities? Of which use are they for traders (in fact, these usually learn little more than what they already know on the functioning of the market)?

4.2 The case of the recent food crisis in Niger: endogenous factors and regional integration

When analysing the Niger crisis, the first thing to recognise is its complexity and hence the fact that it is still far from being fully explained. However, one can attempt to reconstruct the situation through the following chain of events. It is obvious that the combination of the locust infestation and the drought that affected Niger in 2004 had very serious repercussions on domestic cereals output, and even more seriously still on livestock production. However, the decline in production, in terms of the average of the five previous years, years, was only estimated at 11% for cereals, which is considerably smaller than the decline in the other Sahelian countries affected by the same scourges.

Although the impact of this decline was particularly serious because of the very pronounced poverty and food vulnerability of Niger, the regional origins of the crisis go a long way towards explaining it. Niger's sensitivity to intra-regional trade is particularly pronounced because of its high degree of foreign trade liberalisation, with the result that the bulk of foreign trade consists of commercial imports, particularly from the countries in the area that have a more favourable rainfall regime, such as Nigeria.

But the Nigerian government recently adopted a series of measures to boost national production to the detriment of imports, particularly for informal re-exports of rice to neighbouring countries, such as Niger, and exports to the whole region.

This policy of boosting domestic agriculture to supply the domestic market, compounded by the closure of the borders, sharply increases domestic food prices. The Nigerian poultry sector in particular considerably increased its maize purchases, and maize prices rose to record levels.

Another consequence has been on private and public revenues from various sources in these neighbouring countries from trading with Nigeria. The steep decline in trade has dragged down these revenues, which have to be taken into account when examining the food crisis.

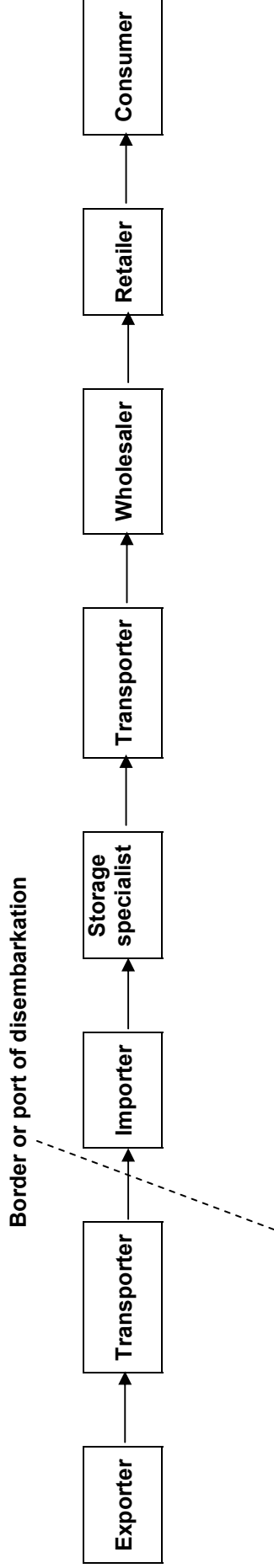
Considering the comparative importance of Nigeria, "isolating" its market in this way has prevented intra-regional trade from playing a partial, but habitual compensating role to offset the food shocks that have hit the region, or has at least it considerably weakened it.

Three other aspects of this mechanism deserve to be mentioned here. Firstly, the way the Niger traders anticipated this increase in prices on the Nigerian market, coupled with the announcement of the food crisis caused them to run down stocks in order to sell to Nigeria more profitably, despite the restrictions. This had a major effect, even though it had none of the features of "panic selling". Secondly, such phenomenon can be partially analyzed as some kind of “off-shore storage” by Nigerian traders of cereals from Niger, but destined to be subsequently “reinjecte” into the Niger market. Lastly, the sharp fall in livestock prices in Niger also placed serious constraints on the possibilities of bartering, despite the fact that barter is prevalent in the region's informal cross-border trade.

Diagram 1

PARTIES SUBSEQUENTLY INVOLVED IN THE IMPORT TRADE

One of many patterns of trade 1/



1/ A few distinctive features of the import trade examined above:

- Imports for feed or processing are not illustrated.
- The importer does not handle storage.
- The wholesaler and the importer live in different towns. Overland transport is therefore needed.
- There is no middlemen between the wholesaler and the retailer.

Diagram 2

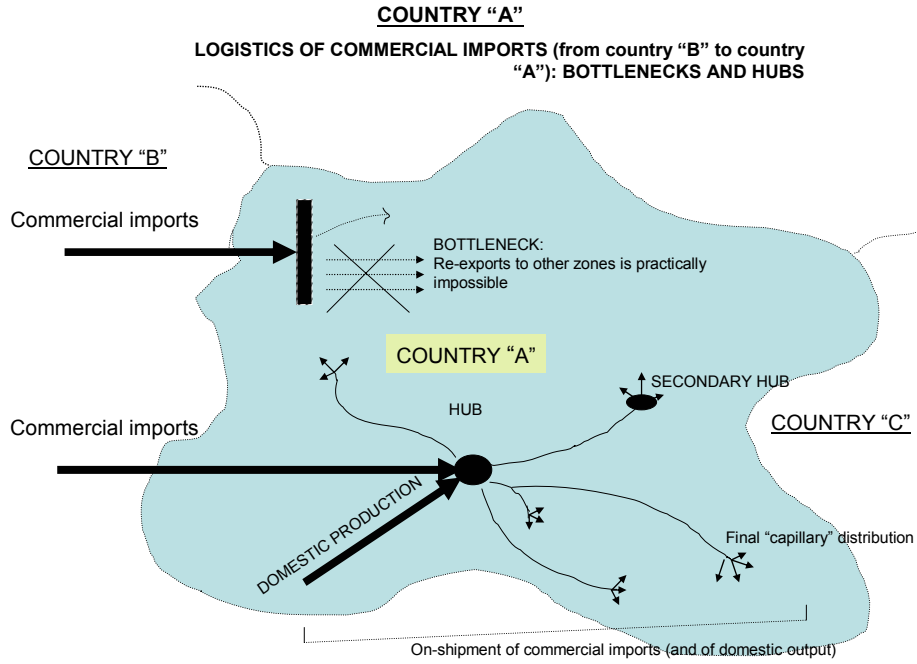
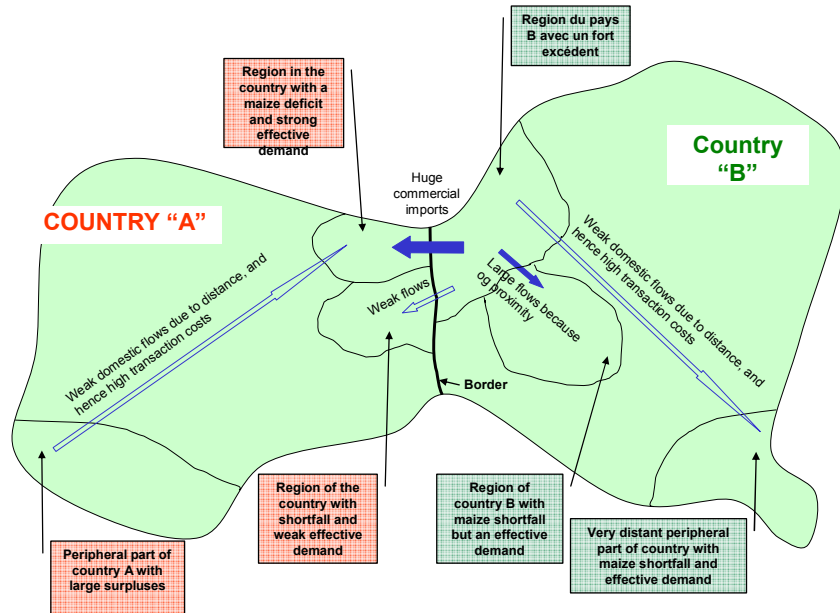


Diagram 3

Commercial imports between two fragmented countries (countries "A" and "B") + domestic trade flows



4.3 Pre-mission practical advice:

- Acquire all the statistics on the country from GIEWS and check the pattern of commercial imports, trying to explain any sharp variations and deviations between commercial import forecasts and the actual ex post figures. Discuss these facts with the person responsible for monitoring at GIEWS or in other FAO services in order to take on board all their comments and questions regarding the meaning of progress or any anomalies in the statistics. See how the food balance adjustment has been made in the past.
- Systematically compare this data with the data produced by the import monitoring networks such as WFP's for monitoring informal trade between the southern African countries, effectively cooperating in advance with the people keeping track of these issues on a daily basis.
- Homogenise data collection and treatment ("*Every mission has its own way to come up with figures*"), however without a rigid, normative, method but instead drawing on lessons learned and taking into account the diversity of situations.
- Prepare ahead of time, notably by selecting relevant issues to be refined while in the field, in-depth market analysis, including available information on prices, in order to optimise the use of limited allocated time.
- As far as extent possible, try and facilitate from Rome, prior to the arrival of the CFSAM, discussions between the Government, NGOs and Aid Agencies in the country, with a view to preparing comprehensive vulnerability and commercial imports assessments based on surveys. This very process will also have the advantage to foster collaboration between the decision makers and then facilitate subsequent consensus on food balance, including commercial imports requirements.
- Collect information on donors' position and information on commercial imports, and tracking possible double counting, and errors of all kinds pertaining to such sources.
- Ask the local FAO representative to give advance notice of the names, addresses, telephone numbers, e-mail addresses etc of the main resource persons in the ministries, and also in the private sector (when there is not a government monopoly): it may be useful to contact them before leaving, particularly parties in the private imports sector, in order to save time on making appointments.
- Prepare meeting notes, to be reviewed before meetings, in order to focus on the ideas to be discussed, while carefully creating a receptive climate, which will instil confidence and trust in the other parties, particularly in the private sector, which would be impossible by merely putting a questionnaire to them.

4.4 How to approach private sector traders: a little advice

One important objective when interviewing traders is having their analysis of the impact on their activities and on the market in general of policy measures already decided upon by the government or likely to be implemented in the future. At stake is not only, so to say, the interviewees' feelings but also the effective decisions that they have taken in the past or that they anticipate to take, *in response to policy moves*.

Anticipation is a key dimension of traders' life, a second nature, and is so as a consequence of the high risks associated with their business. It follows that traders are a major source of information in a context – that of a highly integrated regional market for staple food – which can undergo rapid and deep evolutions. Their comments on – and their reactions to – the effective or likely consequences of policy moves, such as tax holidays, release of security stocks, public tenders, closure of borders, trade blockade, etc., both in their respective countries and in surrounding countries, can decisively help decipher complex situations. "Official" – i.e. mostly national – information is often limited, as may also be the degree of awareness, in government (and donor) circles, of some policies' implications, hence the analysis that they can deliver to CFSAM members.

Traders will then offer a new angle to look at the interactions between markets and policies. As such, their well-prepared consultation will facilitate an essential part of CFSAM's mandate. CFSAM's objective is indeed not to judge policies in themselves – policies will be considered as a given – but to appreciate their consequences on food access, availability and markets. It is worth noting that the same rationale applies to the policy response to shocks, such as drought or locust invasion: traders are in a good position to measure the effects of government's and donors' decisions in order to try and alleviate those shocks.

It is important to note a few precautions to be taken, perhaps with even more care than usual, when talking with traders. What matters is the trader's insider's view of the food situation. Communication of experience

is the goal. The information searched is by nature mostly qualitative. Such communication may thus become very difficult if little interest is shown by the interviewer in the way trade is effectuated, i.e. in the highly valuable experience detained by the interlocutor. Any such lack of interest will likely be detected instantly by the interviewee. Displaying from the outset a dry "questionnaire approach" may be interpreted as a lack of interest. Some traders are impassioned technicians of their profession. Often, meaningful explanations of food problems, that may suddenly unveil a hidden patch of reality, will surge more or less unexpectedly in the course of the conversation provided that there is sufficient confidence and a rigid style is avoided. It should also be clear that the mission is not searching company-specific data but general data.

While traders hence are key informants on marketing and vulnerability issues, caution should be taken in dealing with them other than already mentioned. First, one should be aware of usually tense and antagonistic relations with representatives from the State, as well as with other traders. Therefore, talking to CFSAMs members, even though these are supposed to be neutral interlocutors, may expose traders to high risks. Confidence must first be instituted. Second, quite evidently, a sufficient number of traders should be probed to detect inevitable biased information and better sense where main import and food security problems are located.



PITFALLS TO BE AVOIDED:

- ***All information, either from official or private sources, must be cross-checked and evaluated.***
- ***Interviewees communicate information based on their own interest or vision.***
- ***Nothing can be taken at face value.***

Identifying the good interlocutors is a prerequisite. Local FAO and WFP delegations or donor representations can be very helpful in such identification. For instance, some of their staff members have worked for a long time in a same country. Hence, with the passing of time, they have established a network of contact persons and key informants, including traders, and gained their confidence. Other agents do not have such a long experience but know well the world of traders, for diverse reasons. Both can provide a list of names and addresses. It is advised to first meet large traders since they detain broad information and can sometimes be contacted more easily, then smaller local import firms. Having a general picture of food import issues through these interviews can help prepare field visits more specifically focussed on cross-border imports, especially to terrestrial transit points. However, such interviews and visits are closely *complementary*. One cannot substitute the other, even though time constraints may impose certain limits to the desire to cover all the scope of the problem.

4.5 Survey tools to be used in the field to acquire a better understanding of commercial imports, particularly informal imports. WFP's southern African network

Before the beginning of a mission, prior knowledge of the most important statistical problems to be resolved can save valuable time in the field by focusing the efforts of mission members on the priorities that are clearly set down. Nevertheless, expectations in this regard should be carefully weighed up, because the mission's agenda is usually very full. The mission must make the best of what time is available. Improvements of this kind can only ever be partial by improving the organisation of the constant human and financial resources involved in mission preparation, conduct and follow-up (and a fortiori, the declining resources available for this work).

In order to ensure the reliability of the data on commercial imports in some cases (formal or informal, because the problem is very largely the same) it will probably be necessary to think of putting in place permanent local surveying systems.

For each country with particular statistical problems one might envisage having a local correspondent living permanently, paid an adequately motivating salary, working specifically on one particular aspect identified in advance as a major source of uncertainty.

Other, more demanding systems require more money to be invested in statistical improvements. But it may well pay off in the end. Remarkable improvements in terms of the reliability of the information obtained at a cost which is always modest (around US\$100 000 a year, excluding the support provided by the local

institutions, such as WFP, FEWSNET or SADC) by the WFP imports monitoring Network in southern Africa, based on the FEWSNet experience, and only for cross-border "informal" imports, are examples that plead in favour of this budgetary effort.

The cross-border informal trade monitoring network in southern Africa: lessons learned

This involves taking note of the progress made in southern Africa thanks to the WFP network.

This monitoring system has made it possible to reveal the magnitude of the situation that had previously been concealed or was only vaguely known, and therefore greatly increase familiarity with the situation. It has made possible to draw valuable lessons for future food balance sheet evaluation missions, in terms both of method and of the spirit that should drive them.

It showed that in some cases *the direction of import flows had been reversed*. This is one of the reasons why the pattern of trade flows was not in itself stable and therefore required constant attention. Any idea of being content with a "snapshot" of it, if that had been the idea, therefore had to be discarded; one example of this reverse trend was the "informal" maize trade between Malawi and Mozambique.

It made it clear that the problem was not so much a matter of "inventing" information on informal trade flows more or less out of nothing, but rather of finding existing information sources that were generally scattered in various places or services, and then acquiring the means of obtaining, gathering, using and disseminating that information, which was fairly inexpensive as a whole, as mentioned earlier. Furthermore, this reasoning applied equally to informal and formal trade, which it was difficult to appreciate because of the many "grey areas".

Computers have proven to be unparalleled tools in this respect, even though until then they had largely been under-used. It was therefore sufficient to enter the data on, for example, import permits or actual imports crossing the border as recorded by the customs authorities, and then transmit this data (ideally by the Internet) to have available a vital tool for analysis which had not previously been available, simply because no-one had ever performed this data processing operation before.

One therefore finds that, generally speaking, many information sources are very little used, but could be exploited fairly inexpensively, and if that were done it would greatly assist our understanding of the part played by commercial imports in meeting national food needs.

Additionally, this would have the further major advantage, as the first few months of the Monitoring Network have already clearly shown, of toning down the sometimes dogmatic nature of the debates on informal trade, by offering reliable and specific information to the parties involved to work on, which until then had been completely unknown. Furthermore, it would also provide a much more tangible understanding of the possibilities of replacing food assistance by food-for-work solutions, or offering money instead of food.

By joining in the implementation of this project, those involved *became aware of the need not to "dramatise" the consequences of disclosing the figures on informal trade which logically went hand-in-hand with implementing it*. These consequences certainly occurred, raising an ethical problem which could have jeopardised the project results.

For in some cases there was a risk that the national authorities would seize on – and shy at – these informal trade figures, considering their magnitude, and take steps to prohibit them, repress them or tax them, being in violation of official policy, even though official policy had previously managed to live with these informal trade flows, closing a blind eye to them. The "hard core" of this problem was what one might consider "contraband", a practice that was often tolerated, because it made possible to find a way around over-harsh trade restriction measures. But being considered by the stakeholders in the businesses concerned as having helped, thanks to the information supplied, to track down the "smugglers" is naturally the safest of destroying nipping in the bud the imports monitoring system, by destroying the trust that people might have in its neutrality.

For even though attention to this aspect should not be relaxed, there have not been any serious problems regarding the recording of cross-border trade flows. To reduce any risks of this kind, the golden rule should

be to ensure that the monitors' findings and the food balance sheet evaluation missions' reports and any other authorities never mention the names of any private businesses or the regions of origin or destination with too much detail that makes them recognisable.

There is another, decisive, reason for optimism regarding the understanding of the undesirable effects of the transparency brought about by this kind of monitoring system: the very keen interest that traders in the countries concerned have shown in the information collected by the monitoring network which they have obtained. The fact that the traders themselves request this information is a major proof of the relevance of this work, and guarantees the continuity of the system that has been put in place. This positive attitude on the part of the traders augurs well for achieving one of the essential objectives of future food balance sheet evaluation missions: to ensure that mission members acquire an adequate - and accurate - familiarity with the rationales governing this trading environment. It is, however, difficult to think that mission members can achieve this familiarity without some system of data *exchange*. It would be rather unrealistic to imagine them meeting traders in order, unilaterally, to extract information from them on what is happening on the markets. It is far better, in addition to meeting the intrinsic and genuine interest of the traders themselves, to be able to work on the basis of corpus of general information of the kind generated by the informal trade monitoring system.

4.6 Useful information for the accurate reporting of commercial imports

Prices

- Basic precaution: be absolutely certain of the stage in the importing process where prices are collected: is it the import phase (at the port, for example), before or after storage, in the wholesale stage, in the retail stage (when the final consumer purchases the products). The prices do not have the same significance in different stages in process, and therefore vary according to the physical and commercial functions they embody. It is only possible to compare like with like.
- It is better to use monthly prices over a period of two or three years.
- Import prices by maritime or overland transport. For formal and informal circuits: try to compare the two (for example, the price per tonne from the main sources, whether by sea or land).
- Wholesale prices: prices in the large towns (for example a 100 kg sack)
- Retail prices in large towns and other areas.
- The frequency and the type of speculation regarding imported commodities and the effect on the range of price variations.
- Variations and peaks between years and during the same year.
- Comparison with prices of the same commodities at similar distribution stages.

Exchange rates on the official and on the parallel markets

- The nominal exchange rate
- Real exchange rate, which is the nominal rate adjusted to take account of the relative price levels between different countries, and measures the change in time of the country's purchasing power.
- The parallel exchange rate varies frequently, and these variations must be known by asking questions.

Logistics

- Who are the transporters, and what mode of transport is used?
- Transport costs, broken down in terms of fuel, repairs, illegal charges or commissions etc
- The state of the roads
- The organisation and security of ports
- Storage infrastructure: its state, procedures, capacity etc. Ownership and management.
- Stock volumes, and how much is strategic? Which commodities and products?

The operation of the market

- Identify the main shocks (climate, conflicts etc) in the countries and in the region, affecting production and imports
- Level of regional market integration
- How much competition is there between domestic production and the world cereals market? How has this evolved over the past few years?
- What risks do traders think they face in their work, including risks caused by conflicts?

Policies implemented

- What restrictions exist on foreign trade? What customs duties (official and real) are levied?
- Does the food pricing policy, particularly consumer subsidies, discourage the private sector? Is there any pressure to keep prices down?

Credit

- How do importers procure credit, and on what terms and conditions?
- How do the banks behave?
- What are the credit limits?
- Public credit policies.

A few practical analysis tools

- Map the trade flows, indicating the geographic breakdown in the importing country: indicate origins, areas of transit and destination. Compare formal imports, informal imports and domestic products: identify main recent changes in these flows.
- Map the main logistical problems (roads, bridges, bottlenecks etc)
- Make a diagram of import channels: who does what, in the different links in the chain?
- Make a price trends graph.

4.7 Conventions regarding the dates of the seasons, illustrating the need for continuous verification and monitoring

Several types of crop seasons are used in these countries' statistics:

- The April-March 'marketing season', for example, in southern Africa;
- November-October, normally used in West Africa;
- July-June, used in Afghanistan and Bangladesh.

In the case of rice, the export statistics are given in terms of a calendar year.

By convention, and to standardise the information, the general rule is to consider a July-June season when drawing up a country's food balance sheet. Since food imports are reported on a monthly basis, it is not difficult to make the necessary adjustments using data on a November-June basis. What is important is to be absolutely certain that everyone is talking about the same thing, that is to say, to know whether the figures are "converted" monthly figures or not, and if so, how the conversion has been calculated. The purpose is to compare comparable figures, namely, figures referring to the same period (and, for example, to avoid mixing a July/June season with an October/September season, for example).

Another convention must also be considered to explain the need for taking precautions in this regard. This convention is that from a statistical point of view, the date at which the ship leaves the home port is taken as the date of its arrival in the port of destination (hence the date the cargo actually becomes available for storage or sale). This simplification is used because there is often no detailed information available on arrivals in port from the authorities of the state of destination, which means that the only data that can be relied on is the data supplied by the exporting countries, indicating shipments and their destinations, but in principle no mention of arrival dates.

This can be misleading when assessing the situation, depending on the moment during the season when the imports actually arrive. For if the shipping time is longer than one month, and it takes place towards the end of the season (for example, in October in the case of an October/November season) the tonnage may be included in the statistics of the next season. This is not a serious problem when the tonnage concerned is small, but it becomes a problem with large tonnages.

It is the case that the (forecast) food balance sheet established for the country may fail to take account of a huge, but delayed, batch of imports. Observations made in certain countries show that this is not a purely theoretical possibility, case (for example, a shipment recorded by certain sources of 300 000 tonnes of rice from Brazil to Senegal before the end of the year (2005) when Senegal has a November/October season, and this tonnage accounts for a substantial share of Senegal's consumption).

The main relevance of this example is that it enables us to make this general remark: the daily task of collecting statistics on the role of commercial imports is essentially a matter of gathering this kind of news - and identifying the problems - which demands a specific, urgent, and sometimes last-minute, effort to find the information and to check it. The result is obviously an approximation, but it must be as accurate as possible.

In order to improve the reliability of the import data, which is poor in some countries, ideally there should be a local contact group that can independently and continuously record formal imports by sea. This makes it possible to confirm the country's official statistics and even replace them when they are clearly wrong, and clarify the problems that may arise after crosschecking them against the statistics kept by international institutions. However, this may be very difficult to do in practical terms, at least as things stand at present, for reasons of cost and or political appropriateness.

- We are therefore at the crossroads of two different approaches: on the one hand recording import data under the present conditions, and on the other hand designing projects to substantially improve these conditions by adequately resourcing them. This project approach would consist, for example, of setting up a system in West Africa to monitor cross-border trade, based on the southern African example.

4.8 The ill-adapted financial instruments used by traders in importing developing countries

Their degree of appropriateness to the needs of local traders is often low. In particular, they scarcely decrease risks. Risks currently incurred are often not manageable, bearing in mind that food trade is a high risk-low margin activity, especially for local traders. In contrast, international trading companies are both supported by their governments through export schemes and draw economic strength from being global networks. Major problems are encountered concerning the financial instruments and all financial aspects related to food import in developing countries. It is all the more so since food trade necessarily absorbs much financial capacity. These weaknesses of the current food financing system also lower the capacity to deal with shocks. Let us quote some of these problems:

- Excessive reliance on collaterals, and poor access to credit generally speaking.
- Lack of knowledge of existing instruments, and resulting needs to raise capacity (the latter applies to government officials and private traders).
- Ongoing acquisition of competence in finance and marketing by new traders: a progressive and difficult process, but a necessary one to enhance competition in the import sector.
- Public tendering is not fast enough to get timely credit and respond in due time to emergencies, thereby decreasing the potential role of the private sector in responding appropriately to such situations.
- Credit ceilings often insufficient and slow to move upward.
- Frequent mismatch between flow of goods and flow of money.
- Payment by debtors can be uncertain, both in the case of private and public buyers.
- Bank-to-bank credit lines are often a bottleneck, which is another serious limit to regional trade.
- Frequent scarcity or fast varying availability of hard currencies.
- Often weak appropriateness of the financial system to deal with shocks.

4.9 Informal and formal commercial imports: differences and complementarities

The situation that the CFSAMs missions face is often that of an insufficient or only recent recognition and limited understanding of the importance of cross-border trade's role in meeting local consumption needs, including those in large cities. Underestimation of the concerned flows of goods, especially staple food, is a frequent consequence of this lack of recognition. It follows that some usual interlocutors, especially in government circles, and amongst donors, may be poorly informed (or sometimes unwilling to speak) about an issue that is however crucial to calculate food balance sheets.

One can see that formal trade and informal trade are often closely linked, or be even more explicit, in many cases they are linked in cross-border commercial operations. This has to do with the "circulation" of import permits issued by the authorities in one country in southern Africa. A permit of this kind, which can

authorise the import of 50 000 tonnes, can be "recycled" among several traders; that is to say, it can be used several times over to market repeated quantities of 50 000 tonnes. In such cases, these "recycled surpluses" have to be sold discreetly, by being included in the informal trade flows. This can be done, for example, by the following operations:

- A large trader engages the services of a hauler
- the truck reaches a point close to the border, and the commodities are off-loaded onto bicycles, or are carried by hand by individuals across the border to avoid liability for plant health taxes which are not due below a certain quantity; splitting up the load in this way makes it possible to avoid paying the taxes.
- After crossing the border, the goods are reloaded on trucks.

It is obvious that the main reason this kind of "recycling" exists is that the documents at the beginning of the administrative process are not computerised, with the result that later on in the process these multiple uses cannot be identified and accounted for. It is useful to know that these practices exist in order to understand the degree to which they can influence the country's food balances. Since these operations are hard to discover, particularly by a short-term mission, any such information can never be accurate. For this very reason it is important to have some idea of the magnitude of the phenomenon, however, because it can help to create a feeling of the market "atmosphere".

However, we must not have a false idea of the "fragility" of informal trade compared with formal trade.

This fragility is often inferred, for example, from the fact that the informal sector traders have little access to credit, which restricts their activities considerably. However, the fact that usually a very limited proportion of traders indeed have access to formal sources of credit does not mean *per se* that these do not get credit at all. There are clear cases of informal finance that can supplement the lack of bank credit. Some impressively efficient regional networks of money houses and middlemen have been developed, like in the Horn of Africa. These networks can easily convert earnings in one country into hard currency or tradable goods, with this having the key advantage to avoid crossing borders and travelling in dangerous areas while carrying an excessive amount of cash. Informal does not mean inefficient or small, as the use of this in fact equally inappropriate term of "formal" may suggest.

In many instances, informal trade represents in any case the only type of exchange that is possible in the conditions which prevail in many areas. Poor regional infrastructure and communications often render quasi impossible "official" trade between neighbouring countries. Furthermore, "official" commercial imports may be in any case severely hampered by the existence of logistic bottlenecks along the marketing channels through which they are forced to transit. This is for instance the case in Ethiopia, where imports must be directed first to Addis-Ababa, but with scant possibility to be re-dispatched to other destinations within the country. Then, the goods may remain stuck in the capital, which makes such commercial imports unprofitable. This is one of the reasons why official imports may difficultly compete with cross-border trade in certain situations. Identifying such bottlenecks and monitoring any removal or modification thereof, notably as traders' technical capacity is building up and policy changes are implemented, is a priority task when it comes to assessing marketing issues that govern food availability.