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An Approach to a Food Aid Strategy

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Summary. — Food aid for market sale should fill the gap between (1) rapidly growing demand fueled by population and income growth and (2) supply composed of slowly growing production and difficult commercial imports. The resulting resources should support an employment-oriented development strategy promoting food production growth. As incomes of the poor rise, food demand will increase and the food aid gap may widen. This should not be confused with similar effects produced by agricultural neglect. This strategy needs long-term food aid commitments and a safety net against food aid cuts. Project, emergency and adjustment food aid can be integrated into this strategy.

1. INTRODUCTION

Food aid is made possible by the existence of food surpluses in developed countries. It provides a useful way of meeting the needs of these countries for surplus disposal, while also helping to achieve important objectives in developing countries. This creates strong domestic support for food aid, which, therefore, generally becomes an addition to the total volume of aid provided to developing countries.

To be desirable from the viewpoint of recipient countries, food aid must avoid certain possible adverse effects and generate certain favorable effects. The adverse effects that must be avoided are: (a) disincentive effects on food production, and (b) dependency effects on food policy. The favorable effects that must be generated are: (a) increased food security, (b) greater equity, and (c) faster development.

The conditions necessary for constructive use of food aid must ensure that food aid satisfies these criteria. These conditions depend to some extent on the nature and uses of food aid. Broadly, food aid can be classified into four types, each of which needs to be examined separately, at least initially. These types are:

1. *Program food aid* intended for sale to meet unsatisfied demand for staple foods;
2. *Project food aid* intended to support specific feeding or developmental projects;
3. *Emergency food aid* intended to meet urgent food requirements under abnormal or disturbed conditions of demand and supply for food;
4. *Adjustment food aid* intended to mitigate

the short-term sectoral adverse effects of different types of adjustment programs (or programs of policy reform).

This paper concentrates on the conditions necessary for constructive use of program food aid and limits its discussion of project, emergency and adjustment food aid to the relationship of these types of food aid to program food aid. These relationships are such that they require an integration between all types of food aid. The conditions for constructive use of food aid thus acquire special significance. Ultimately, food aid involves a transfer of resources to a developing country. These resources can be used to promote development. The conditions for the constructive use of food aid cannot, therefore, be framed without a full understanding of the development process and of the role that food aid can play in it. When framed in this way, these conditions constitute an approach to a food aid strategy.

2. PROGRAM FOOD AID

(a) *The food aid gap*

Program food aid to developing countries is intended for sale in the market. The object of such

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aid is mainly to meet unsatisfied demand for food at some defined level of prices, though the definition of this price level may often be implicit rather than explicit. Such aid thus fills the gap between the quantities of food that are demanded and supplied at those prices. This demand-supply gap arises because the rate of growth in the demand for food in developing countries tends to be higher than the rate of growth in the supply of food (domestic production plus commercial imports) at those prices.

Rates of population growth in many developing countries are high. Efforts at development result in some increases in per capita income in many of them in spite of the growth of population. Given their existing low levels of food consumption, their income elasticities of demand for food tend to be high. Their per capita demand for food, therefore, tends to increase. Total food demand thus increases at a rapid pace. Without new technology, improved extension services, modern inputs and heavy investment in infrastructure and productive facilities, food production cannot grow as rapidly, particularly during the early years of development. The food import gap thus grows rapidly. It is difficult to fill this widening gap with commercial food imports. The result is a gap between demand and supply at the given level of prices.

At any given time, and abstracting from changes in stocks, the quantities of food demanded and supplied at given prices, and, therefore, the gap between them may in some sense be treated as given. The exact size of this gap may, nevertheless, be difficult to determine without further consideration. This is because commercial food imports and food aid, while complementing one another in filling the food import gap, also function as substitutes in doing so. Therefore, in determining the amount of food aid, careful consideration needs to be given to the alternative uses to which foreign exchange can be put if it is not used for importing food. The volume of commercial food imports determined after such consideration would then fix the food aid gap more sharply. To ensure that the prices of food do not fall below or rise above the given levels, program food aid must not exceed or be less than the food aid gap defined in this manner.

This way of stating the matter implies an understanding about the relationship between food prices and the production of food in developing countries. In the short run, food production tends to be quite inelastic to producer prices. Any excess of demand over supply at given prices will, therefore, not result in any significant addition to output. With the volume of

commercial imports treated as given, the excess demand will, therefore, have the effect of increasing both producer and retail prices. Equilibrium in the market will be established mainly by a reduction in the quantity of food consumed. This reduction of consumption will necessarily occur primarily amongst the poor. By filling the gap at given prices, food aid thus helps to sustain the consumption of the poor. Even in the longer run, *beyond a point*, the elasticity of response of food production to food prices — provided the relative prices of food and non-food agricultural crops are kept unchanged — is extremely low. Provided food prices are sufficiently high to make production for the market worthwhile, increases in food production do not depend on increases in prices but on such factors as technology and investment, which can be determined independently of prices.

Against this background, it is possible to examine the criticism that since program food aid is sold on the market, it produces disincentive effects on food production by reducing food prices. There is no doubt that, if one abstracts from any effect that program food aid may produce on the demand for food, such food aid does reduce prices below the level that would have prevailed if the supply had consisted only of domestic production and the given quantity of commercial imports. However, within a static framework of this kind, it would be equally correct to say that commercial food imports reduce prices below the level that would have prevailed if, given the demand, the supply had consisted only of domestic production. The issue is, therefore, not whether food aid reduces food prices but whether it reduces them to such low levels that they start having disincentive effects on food production in the environment prevailing in most developing countries. The role played by food aid in this connection can be understood more clearly if instead of saying that food aid reduces prices, it is recognized that food aid prevents food prices from rising too rapidly as both population and per capita income increase over a period.

The early controversy about food aid to India under PL 480 brings out clearly the significance of the different variables and of the relationships between them discussed above in considering the role of food aid. In response to criticisms by Schultz (1964, 1966) and Mason (1966), it was pointed out by Dantwala (1967) that India's food problem during this period (1949/50-1964/65) did not arise from any failure of food production growth. In fact, food production increased at the fairly rapid rate of 2.98% per annum, but this was not adequate only because of rapidly rising

population and money incomes. Food aid helped to prevent the excessive increase in food prices that would otherwise have taken place in this situation, but the resulting prices were not absolutely or relatively low and the farmers' terms of trade were not unfavorable.

Dantwala (1967) has also shown that still faster growth in food production was not inhibited during this period by high input prices. He points out that "The real bottleneck in the further extension of fertilizer use in India is its availability, and, till the introduction of high-yielding varieties, a relatively low technical coefficient of output response at the higher level of fertilizer application" (p. 14). This emphasizes the role of input availability and technological change in increasing food production. Mere adjustments in output and input prices are not necessarily helpful. Besides, the impact of high food prices on the consumption of the poor during the interim period before production can increase sufficiently has to be taken into account. Food prices must, therefore, not be so low as to produce disincentive effects on production but once they are at an adequate level, further increases do harm to the consumption of the poor without providing any real stimulus to production. India's First Five Year Plan described such prices as reasonable prices. Food aid should be neither more nor less than is necessary to maintain such reasonable prices.

While the appropriate level of reasonable prices in particular cases may be the subject of debate, the principle that program food aid should be neither too large nor too small relative to some agreed reasonable price level is clear. The food aid gap at a given time can therefore be defined as the gap between demand at reasonable prices and the sum of domestic production and commercial imports at those prices.

(b) *Future food aid needs*

Over a period of years, the elements affecting the food aid situation for any particular country may change and as a result its food aid gap may also change. Per capita incomes could be expected to increase. Assuming that prices are held unchanged in real terms, per capita demand for food would also rise. The extent of the increase would depend on the income elasticity of the demand for food. Population would tend to rise over the period. The total demand for food could be estimated for future years by multiplying the estimated population for any future year by the per capita demand for food projected for that year.

Food production could also be expected to in-

crease over time. A reasonable level of commercial imports for that year can be determined on the basis of specified assumptions. If these elements are projected on a trend basis, a trend estimate of the food aid gap can be obtained for future years (Ezekiel, 1988). Food aid should be planned to cover this gap in the future.

Estimates of trend program food aid needs for future years are based on the level of projected trend production in each future year. In fact, production in any year is likely to be higher or lower than the projected trend level due to variations in climatic conditions and other factors. If it is assumed that consumption is to be maintained at trend levels in spite of such variations in production, it becomes necessary to have compensatory variations in supplies from other sources.

Stocks could be used to offset variations in production, but steps would then have to be taken to build them up in the first instance and to rebuild them in good years to the extent that they are used up in bad years. For this to be possible, if food aid is not to be raised in bad years, it would have to be maintained at trend levels even in good years. Variations in commercial imports can also perform this function of offsetting production variations, but a similar argument applies to them; commercial food imports would have to be cut in good years if they are to be increased in bad years, while food aid is maintained at trend levels throughout. Besides, it may be difficult for a developing country to finance increased commercial imports in bad years without cutting other essential imports. If a developing country uses its foreign exchange reserves for this purpose, it would need to build them up in good production years. If the country borrows abroad to finance additional imports, such credit would have to be repaid. This would apply even to borrowing from the International Monetary Fund, though the cost of such borrowing might be somewhat smaller than for borrowing in normal financial markets.

For these reasons, it may be best to vary food aid from year to year as variations occur in food production while maintaining commercial food imports at trend levels and avoiding variations in stock. This would ensure that the recipient country would not have to face variations in its food prices and/or food availability nor bear the costs involved in holding large food stocks or in varying commercial imports to deal with variations in domestic food production.

Various external conditions may affect a country's capacity to import normal quantities of food commercially. The prices of food on world markets may rise above normal levels. The prices of other essential imports such as those of energy

may rise. The prices of the country's main exports may fall. Internally, shortfalls may occur in the production of export commodities or other essential goods. All of these would tend to affect the country's normal capacity to import food commercially. An appropriate change in the estimated food aid gap to be filled by program food aid would become necessary.

Conditions in the developing country receiving food aid are not likely to remain consistent with the assumptions made in projecting future trend food aid requirements. External conditions affecting the country may change. Technological change may affect its agriculture or other sectors of its economy. The country may bring about substantial changes in its economic policies. These may affect its trend demand for food or its production. Structural changes of this kind must be taken into account in determining its needs. The quantity of food aid provided to the country must be changed accordingly so that it is neither more nor less than the food aid gap.

(c) *Constructive use of program food aid*

It is now possible to formulate the first two conditions for the constructive use of program food aid. These could be stated as follows:

1. Program food aid provided in each year should be neither in excess of nor less than the food aid gap adjusted for changes in food stocks. This food aid gap should be separately calculated for each year. It could also be estimated on a trend basis for future years but year-to-year changes in food production and structural changes affecting demand, production and commercial imports should then be taken into account as they occur so that the food aid gap is correctly estimated for each year.
2. The producer food prices with respect to which the food aid gap is determined should be sufficiently high to provide adequate incentives for farmers to produce more food without the corresponding retail prices being so high as to reduce the consumption of the poor below minimum levels, given the existing level and structure of incomes.

3. THE DEVELOPMENT CONTEXT

(a) *The problem*

This discussion of program food aid deals with the way in which food aid fits into the existing

food situation in a particular year or into the expected food situation in future years. It takes the values of the elements determining the food aid gap as either given or as changing independently of food aid itself. However, there are factors which affect the size of the food aid gap that are not independent of food aid and how it is used. These include the way in which the resources that food aid represents are used in the economy or even the way in which all resources are used and the entire set of socioeconomic policies are framed in view of the availability of food aid.

The relationship between food aid and the size of the food aid gap can be most easily seen in connection with the proceeds from the sale of program food aid. These proceeds take the form of domestic currency resources into which the food aid gets transformed when it is sold in the market. To the extent that food aid is substituted for food that would have been otherwise imported commercially, a corresponding amount of foreign exchange is released. For the rest, food aid becomes available as a domestic resource in the form of counterpart funds after it has helped to add to the volume of food consumption. The use to which these foreign exchange and domestic resources are put determines how the elements in the identity determining the food aid gap will behave in the future.

It is possible for these resources to be dissipated in military and civil expenditure that makes little or no contribution to the relief of the food problem through growth in food production or to development through growth in employment and income. In this situation, the food aid gap may widen at an alarming pace and create a legitimate feeling that food aid has helped to create a food aid dependency. However, it is possible to use the resources resulting from the sale of program food aid in more positive ways. The effects of doing so would depend on their specific uses.

(b) *Increasing food production*

Program food aid becomes necessary because domestic food production has not been able to grow adequately relative to the growth of the domestic demand for it as incomes and population rise. The most common criticism of such food aid is that countries receiving it come to depend on it and relax their efforts to increase their own food production. The obvious reply to that criticism is to use the counterpart funds generated from the sale of program food aid to promote increases in domestic food production.

One important way in which increases in food production could be promoted would be to build

rural infrastructure in the form of roads, irrigation facilities and other public rural assets. It is also possible to use project food aid to support construction of rural infrastructure. Coordinated use of project food aid and counterpart funds in such construction could be very effective. Such infrastructure improves availability and reduces costs of inputs. It also improves access to markets and raises producer prices relative to consumer prices. These changes raise the profitability of farming and thus increase the incentive to produce more food. Some types of infrastructure such as irrigation facilities contribute directly to increases in production. Counterpart funds can also be used to promote agricultural research and to strengthen extension services so as to improve the technology used in food production. These funds can also be used to increase the availability of rural credit.

The effect of this approach would be to increase food production at a faster pace than might otherwise have been possible. Other things remaining the same, the food aid gap would tend to narrow and may perhaps even disappear. This would provide an effective answer to those who believe that the provision of food aid generates a dependency on food aid and would be found attractive by those who consider self-sufficiency in food to be a desirable objective. An increase in food production is certainly desirable in any case.

(c) Raising the rate of income growth

To the extent that counterpart funds are spent on the construction of rural infrastructure using labor-intensive techniques as far as possible, employment and incomes are created immediately for the rural poor during the construction phase. The demand for food should increase immediately as a result. While food aid adds to the immediate supply of food, its proper use thus ensures that there is also an immediate increase in the demand for food, though this may not be of equal magnitude. Food prices therefore do not fall as much with such use of counterpart funds as they would have done otherwise.

Of greater interest is the somewhat longer-term impact of food aid. If counterpart funds are used to promote increases in food production along the lines suggested, they would automatically also promote increases in employment and incomes during the operational phase of the infrastructure assets that are created. In turn, this would generate increases in the demand for food.

The magnitude of the increases in the demand for food depends on the extent to which increases

in food production bring about increases in employment and in the incomes of the poor. The net effect would therefore vary. However, as long as the increase in incomes is looked upon as only incidental to the increase in food production, it seems likely that the overall increase in the rate of growth of income would be only marginal. The increase in the demand for food would therefore tend to be smaller than the increase in food production. Thus, the use of counterpart funds to promote increased food production would tend to reduce the size of the food aid gap relative to what it would have been otherwise.

The actual behavior of the food aid gap would of course depend on other factors. If, for example, population is growing rapidly, the food aid gap may continue to expand. The use of counterpart funds to promote food production may in this situation be able at most to slow down the pace at which the food aid gap is growing. However, under more favorable circumstances relating to population and food production, the food aid gap may actually contract over time and may even be eliminated. While this outcome is certainly preferable to a situation in which food aid keeps rising rapidly because of wasteful use of counterpart funds or neglect of agriculture, it should be recognized that the pace at which incomes are growing would increase only slightly in these situations. As a result, the elimination of the food aid gap could occur at unacceptably low levels of per capita income, that is, while widespread poverty continues to prevail. This is what, for example, may have happened in India (Ezekiel, 1984). Such an outcome does not seem to make sense. It is, therefore, necessary to put the use of food aid into a proper perspective.

(d) Employment-oriented development strategy

In determining the uses of food aid, the objective should be not the elimination or narrowing of the food aid gap, but the elimination or reduction of poverty. This objective should dictate the use not merely of the counterpart funds from the sale of program food aid but, in the framework given by the availability of food aid, of all other resources as well (Mellor, 1978, 1983). The focus of the use of counterpart funds, as well as of all other resources, should, therefore, be on increasing incomes, particularly among the poor. Even when these resources are used for increasing the production of the main staple foods, special attention should be paid to how increases can be brought about in employment in particular and the incomes of the poor in general. However, there is no reason to limit attention in this con-

nection to the staple food sector. Other sectors should also be considered carefully in determining the proper use of available resources.

It is possible to make major gains in employment and in the incomes of the poor by devoting resources to increases in agricultural production outside the main staple foods. These would include both food and non-food crops. Similarly, they would include both crops meant for domestic consumption and export crops. However, in determining the items chosen for expansion and the types of activities or the institutional forms through which the expansion is brought about, the primary objective of raising employment and the incomes of the poor should be kept in mind. Increased dairy production, particularly when it is small-scale, may provide one avenue for promoting increases in employment and income (Ezekiel, 1987b). Smallholder tea or coffee production could be another avenue.

To complement the use of resources in the food and non-food agricultural sectors, resources devoted to the non-agricultural sector should also be given as much of an employment orientation as possible. As long as widespread poverty prevails, highly capital-intensive industrial schemes should ordinarily be eschewed in favor of more employment-oriented projects that would generate incomes mainly in the hands of the poor.

An employment-oriented strategy of the kind outlined would produce a higher overall rate of growth of income as well as a more equitable distribution of that income. In this situation, the rate of growth of demand for staple foods would rise sharply. At the same time, the rate of growth of production of staple foods would also rise. Since the growth in demand would emanate from increases in the incomes of the poor in all sectors, while the growth of production would occur only in the staple food sector, it seems likely that an employment-oriented equitable strategy of development would produce a widening of the food aid gap over time that may be quite sharp.

(c) *Widening food aid gap*

It has been noted earlier that a wasteful use of counterpart funds or a neglect of agriculture in general may lead to an alarming widening of the food aid gap. It now appears that the adoption of a powerful employment-oriented strategy of development with the support of food aid could have the same effect, at least in the initial years. It is even likely that the food aid gap may grow more rapidly under an employment-oriented strategy than it would in a situation in which resources are wasted or agriculture is neglected.

The fact that the size of the food aid gap would tend to widen rapidly in both situations does not, however, justify their being lumped together and treated equally as examples of how food aid fosters food aid dependency. The two situations are entirely different in character and must be clearly distinguished. One situation results from a deliberate and active development strategy based boldly on the use of food aid as a development resource. The other results from a negative approach to development and to food aid that is reflected in a waste of resources or a neglect of agriculture. The development of either situation may be encouraged by the availability of food aid. What distinguishes them is the difference in the results that are produced.

The growth in food aid under an employment-oriented strategy is accompanied by rapidly rising income as well as rapidly rising food production. In one sense therefore, the widening of the food aid gap under this strategy provides a measure of the country's increasing capacity to absorb program food aid in an effective manner.

It is thus apparent that the conditions for the constructive use of food aid cannot be considered independently of issues relating to the objectives of development and the strategies by which they can be achieved. Food aid can function as an instrument for loosening the constraint that limited availability of food imposes on the adoption of a development strategy based on rapid growth of employment and income. It does this not only by filling the widening food aid gap that results from such a strategy but by providing increasing resources to implement it. A rapid growth in the volume of needed food aid both results from and promotes rapid development with equity.

(f) *Long-term commitment*

For a country to adopt an employment-oriented development strategy based on food aid along the lines suggested above, it must be confident that it will receive the rapidly increasing quantities of food aid that it will then require. Two points need to be noted in this connection. First, such a strategy of development would generally take a few years to produce results. Second, once it has developed a large food aid gap as a result of this policy, it could face serious difficulties if it is unable to obtain the food aid that it needs.

In this situation, if developing countries are to make the longer-term commitment that is involved in adopting an employment-oriented strategy of development, donors in turn will have to make the corresponding longer-term commit-

ment to provide the increasing quantities of food aid that will be needed. In particular, donors will have to recognize that such increasing food aid needs do not arise from a failure of administration or a wilful neglect of agriculture but from the deliberate adoption of a strategy in which the demand for food is being pushed up at a faster pace than the rapidly rising production of food.

Both donors and recipients must recognize that in this situation the rapid income growth in the recipient country is only possible because of the increasing quantities of food aid that are being provided. They must also recognize that these increasing quantities of food aid represent increasing quantities of development resources that are being transferred in this manner in order to foster faster growth with equity. Further, they must recognize that the food aid gap will ultimately start contracting and even disappear altogether as (i) the growth in demand for food begins to slow down as both population growth rates and income elasticities of demand fall, (ii) the growth in food production begins to accelerate, and (iii) the country's capacity to pay for commercial imports increases.

(g) *Need for a safety net*

A country adopting a long-term employment-oriented strategy of development based on increasing receipts of food aid along the lines discussed above faces one serious risk. For whatever reason, food aid may become unavailable in the needed quantities even though long-term commitments have been made along the lines discussed above. The country may then find itself unable to satisfy the demand for food that it has generated. Food prices may rise sharply and unrest may occur as people who have become accustomed to consuming food at certain levels are suddenly deprived of part of that food.

The fact that food consumption would have been much lower if an employment-oriented development strategy had not been implemented is important but not very helpful in this situation. This is because a situation in which people are suddenly unable to meet their normal standards of food is quite different from one in which they have simply not achieved those standards. Faced with a cutback in needed food aid, a developing country may be able to cut back other imports, draw down reserves or borrow in financial markets abroad in order to finance additional commercial imports. However, the scope for taking any of these steps is limited and some damage would undoubtedly be done in the process. There is, therefore, need for some arrangement that

could function as a safety net by providing funds on an assured basis for financing additional commercial cereal imports.

The International Monetary Fund (IMF) Cereal Import Financing Scheme seems to provide an arrangement of this kind. Unfortunately, assistance under the scheme is subject to many restrictions. Their effect is to make it an unreliable source of assistance in case of need. Suggestions have been made for its improvement (Ezekiel, 1985). These need not imply a much larger use of its resources in the normal course. Recourse to it would not be ordinarily necessary for food aid receiving countries if variations in food aid are used to offset variations in domestic food production. However, if the suggested improvements are carried out, the scheme could provide the needed assurance to a country embarking on a long-term employment-oriented development strategy that it would be able to obtain assistance to finance additional commercial imports if that became really necessary in some future year.

(h) *Additional conditions for program food aid*

It is now possible to formulate four additional conditions for the constructive use of program food aid. These are:

3. Counterpart funds from the sale of program food aid should be used to increase food production. This will also result in some increases in employment and income and hence in the demand for food.
4. As a preferred alternative to Condition 3 above, an employment-oriented strategy of development should be adopted in which all resources, including the counterpart funds generated from the sale of program food aid, are used in the light of the availability of food aid, to promote rapid increases in employment and in the incomes of the poor. This should be done through
 - (a) a suitable mix of growth of *labor-intensive*
 - (i) production of staple foods,
 - (ii) production of agricultural goods other than staple foods,
 - (iii) non-agricultural industries, and,
 - (iv) all types of services in both rural and urban areas;
 - (b) labor-intensive infrastructure construction activities in both rural and urban areas.
5. Both donors and recipients of food aid should make the necessary long-term commitment to the provision of the increasing

quantities of food aid that would be required within the framework suggested in Condition 4.

6. Recipient countries should be provided with a safety net to protect them against a failure of food aid in some future year after they have embarked on such a program through assured access to financial assistance for financing food imports on a concessional basis under reasonable arrangements such as those that could be incorporated into an *improved* IMF Cereal Import Financing Scheme.

4. NON-PROGRAM FOOD AID

(a) *Project food aid*

Project food aid is provided in support of specific projects. It is generally meant to cover the food costs of projects, though even such food aid may be sold in a closed loop arrangement. Project food aid may also cover other project costs, but it then functions like program food aid, except that the proceeds of food sales are committed to the particular project (Ezekiel and Gandhi, 1987). Projects supported by project food aid fall into two basic categories: (a) feeding projects and (b) developmental projects.

The object of feeding projects is to provide food to the hungry in general and to vulnerable groups among them in particular. Problems arise in identifying the target groups and ensuring that the food aid that is provided results in a corresponding net addition to the food consumption of the targeted individuals. Intra-family adjustments in the food consumption of different members of the family and adjustments between the family's consumption of food and of other items are often made.

For these reasons, increasing attention has been focused in recent years on ways of increasing the incomes of the poor through employment projects, which are self-targeting, rather than trying to feed poor families or specified members of such families directly. Admittedly, such projects cannot help those who are unable to work. Feeding projects may still be needed for them. Though employment projects may originate from concepts underlying feeding projects, they increasingly take on the characteristics of developmental projects. There are obvious trade-offs between humanitarian and developmental objectives in such projects, but if adequate attention is paid to the formulation, design and implementation of projects, it seems likely that assets would

be created that could make a lasting contribution to the growth of employment and income.

Project food aid cannot operate without complementary financial and other resources. The counterpart funds from program food aid may be used for the purpose. As indicated earlier, additional project food aid -- which is then described as monetized food aid -- may be provided for sale to obtain financial resources, but such food aid is then essentially similar to program food aid. Project food aid that is provided to cover the food costs of projects is thus complementary to program food aid. If program food aid is increased over time because of the adoption of an employment-oriented strategy of development, as suggested earlier, increases take place in the financial resources available to complement project food aid. More food aid supported projects can then be undertaken.

The adoption of an employment-oriented pattern of investment has wider implications in this context. If such a strategy is adopted with the support of program food aid and some of the resulting counterpart funds are used to complement project food aid, the effect should be a rapid long-term rise in employment and in the incomes of the poor. After an initial period of time, this should make feeding projects and relief-oriented developmental projects increasingly unnecessary, except perhaps for particularly backward areas or disadvantaged groups. Since organization of such projects in poor developing countries is difficult and expensive, a reduction in the need for them should be considered to be an important advantage of such a development strategy and of the use of relatively large (and initially increasing) quantities of program food aid to support it.

(b) *Emergency food aid*

Emergency food aid is provided to meet situations in which the conditions of food demand and supply that normally exist in an area have been seriously disturbed or upset, leading to a higher probability of acute hunger, starvation and even death for large sections of the population. Emergencies of this kind may arise because of an event such as an earthquake, storm or flood, because of civil or military disturbances, or because of drought. Famines caused by drought and some of those caused by floods fall into a special category. They are repetitive and preventable. Food aid helps the victims of these disasters to satisfy their minimum food needs, though it cannot meet other needs such as those for clothing, shelter and medical treatment.

8

Food aid for famines has often been too little and too late. It has often been provided too far from the homes of the affected population. Also, it has usually provided too little assistance for rehabilitation. Besides these weaknesses, emergency food aid has often been used to support feeding of the affected population just as in "feeding" projects, with little or no attempt to utilize the "labor resource" that becomes available in this situation to create durable assets that could make a contribution to production, employment and incomes, and to possible prevention of famine, in the future.

If food aid for famine relief is used to create long-term assets, it can contribute significantly to development in general and to famine prevention in particular. It is possible to link measures to deal with famine with those intended to deal with seasonal and structural unemployment in "normal" years. This would be particularly useful because the permanent administrative and institutional apparatus that would be created for the latter would also be capable of dealing efficiently with famine when it occurs. Useful lessons in this connection can be drawn from the experience of the Maharashtra Employment Guarantee Scheme, which has now been in operation for over 12 years (Ezekiel, 1987a).

More broadly, famine prevention is best treated as one aspect of development. Those factors that contribute to development through increased production and higher incomes automatically provide some measure of protection against the worst effects of adverse climatic conditions and may even help to prevent famine. It may be necessary to adopt an area-specific approach if famine prevention is to succeed within a short period of time. Such an approach can, however, be more easily fitted into a development program if that program is promoting growth at a rapid pace than if growth is slow.

(c) *Adjustment food aid*

Adjustment food aid is intended to support programs of policy reform aimed at bringing about desired changes in the working of the economy as a whole or of specific components of it. The immediate effect of such reforms is generally to bring about a worsening of the conditions of the poor because employment and incomes fall and food prices rise. The food consumption and nutrition levels of the poor, therefore, tend to fall. In combination with counterpart funds from program food aid, adjustment food aid can help to mitigate these interim adverse effects of policy reform on the poor in addition to providing

directly some of the resources needed for such programs. This also helps to reduce opposition to these adjustment programs. There are three broad types of policy reform, all of which can be supported by adjustment food aid. These are: (i) Structural Adjustment Programs, (ii) Balance of Payments Adjustment Programs, and (iii) Market Restructuring Programs.

Structural adjustment programs are comprehensive programs of adjustment aimed at improving the efficiency of resource use throughout the economy and are often supported by structural adjustment loans from the World Bank. These programs generally call for liberalization of trade and elimination of subsidies of various kinds including those on food. Structural adjustment loans are intended to cover the initial excesses of imports that develop as a result of the program and to finance needed additional investments in new, more competitive industries. However, they do not provide any resources to mitigate the adverse effects which reduced employment and higher food prices produce on the poor. Counterpart funds from program food aid and additional adjustment food aid can mitigate these adverse effects.

Balance of payments adjustment programs are short-term programs which have the limited objective of improving the balance of payments position of developing countries within three to five years. Such programs may be supported by balance of payments loans from the International Monetary Fund. They generally call for exchange rate devaluation and a cutting back of money supply growth rates through reductions in budgetary deficits. For this purpose, food and other subsidies are reduced and public sector schemes for employment generation and income transfer are sharply contracted. Imports, often including commercial imports of food, fall. The loans provided in support of such programs are intended to cover existing balance of payments deficits, but do not provide any resources to mitigate the adverse effects which the program produces on the poor. Counterpart funds and additional adjustment food aid can mitigate these adverse effects.

Market restructuring programs are programs of adjustment aimed at rationalizing and strengthening the functioning of food markets by raising producer prices and opening the market to the private sector. These programs could be supported by special programs of financial assistance from donors. However, for the most part, they have been supported by food aid and the programming of counterpart funds generated by sale of program food aid. Counterpart funds and adjustment food aid can be used to keep consumer

prices from rising immediately to the full extent when producer prices are raised and to create buffer stocks that can protect both consumers and producers from excessive swings in open market prices.

An employment-oriented strategy based on program food aid along the lines suggested presupposes that maximum efforts are made to achieve an efficient use of domestic resources in the development process. The implementation of such a strategy may, therefore, have to be initiated by adopting a market restructuring program as well as balance of payments and structural adjustment programs depending upon prevailing circumstances. Once the strategy has been successfully launched, the efficiency of the market in particular and of resource use in general should be maintained while trade and exchange rate policies are not allowed to get out of line. If this is properly done, these different types of adjustment should not be needed again unless internal or external shocks create new balance of payments or other difficulties.

5. INTEGRATED FOOD AID AND DEVELOPMENT

Food aid is a development resource. If it is used, as it should be, to support an employment-oriented strategy of development, not only the counterpart funds from the sale of program food aid, but all other resources should be used to promote rapid increases in employment and income. This would require, but not be limited to, the promotion of food production. Food production would then increase at a rapid pace, but income and the demand for food would grow even more rapidly. The food aid gap is likely to expand initially as a result. This would make it possible for the country to absorb increasingly larger resources in this form and thus continue to support its strategy of rapid and equitable development.

Development along these lines would create conditions in which project and emergency food aid would become less and less necessary. Until then, however, such aid should also be used to complement the employment-oriented strategy of development by dealing with emergency situations, strengthening the infrastructure needed for growth and creating the apparatus for promoting rapid development.

As indicated earlier, counterpart funds and adjustment food aid should be utilized to support whatever adjustments are needed at the time at which an employment-oriented strategy of development based on program food aid is initiated. Once the needed initial adjustments are made, adjustment food aid should no longer be required as long as the conditions necessary for efficient resource use are maintained, unless the country suffers internal or external shocks to its economic system. A country that follows this path is likely to find itself increasingly capable of handling even such shocks without much assistance from abroad.

The best results are thus likely to be obtained by combining an employment-oriented development strategy with initial structural, balance of payments and market reforms and with rural labor-intensive infrastructure projects (as well as any needed feeding projects) implemented during normal, seasonal or emergency periods. Food aid should be provided in whatever forms and quantities are needed to support this approach.

The aggregate quantities of different types of food aid needed under this approach would be large and would probably expand initially at what appears to be an alarming rate. However, this is primarily because the combination of an employment-oriented development strategy, an increase in the efficiency of resource use, and a focus on creation of necessary rural infrastructure, brings about rapid increases in income and hence in the demand for food at current high income elasticities of demand for food and high population growth rates. In this situation, even though production of staple foods and commercial imports of food may both grow steadily over the initial period, the program food aid gap may nevertheless grow sharply. This gap would narrow only later as population growth rates and income elasticities of demand start falling and rates of growth of staple food production and of commercial food imports start rising.

Any judgment on the large and initially increasing volume of food aid of all types that such an approach requires should recognize that this is not due to failures of policy. It is due rather to success in increasing rates of growth of employment and income, and therefore in reducing the degree of absolute poverty and hunger. The large and increasing volume of food aid during the initial period creates the conditions under which the need for all types of food aid — program, project, emergency and adjustment — is ultimately reduced and even eliminated.

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