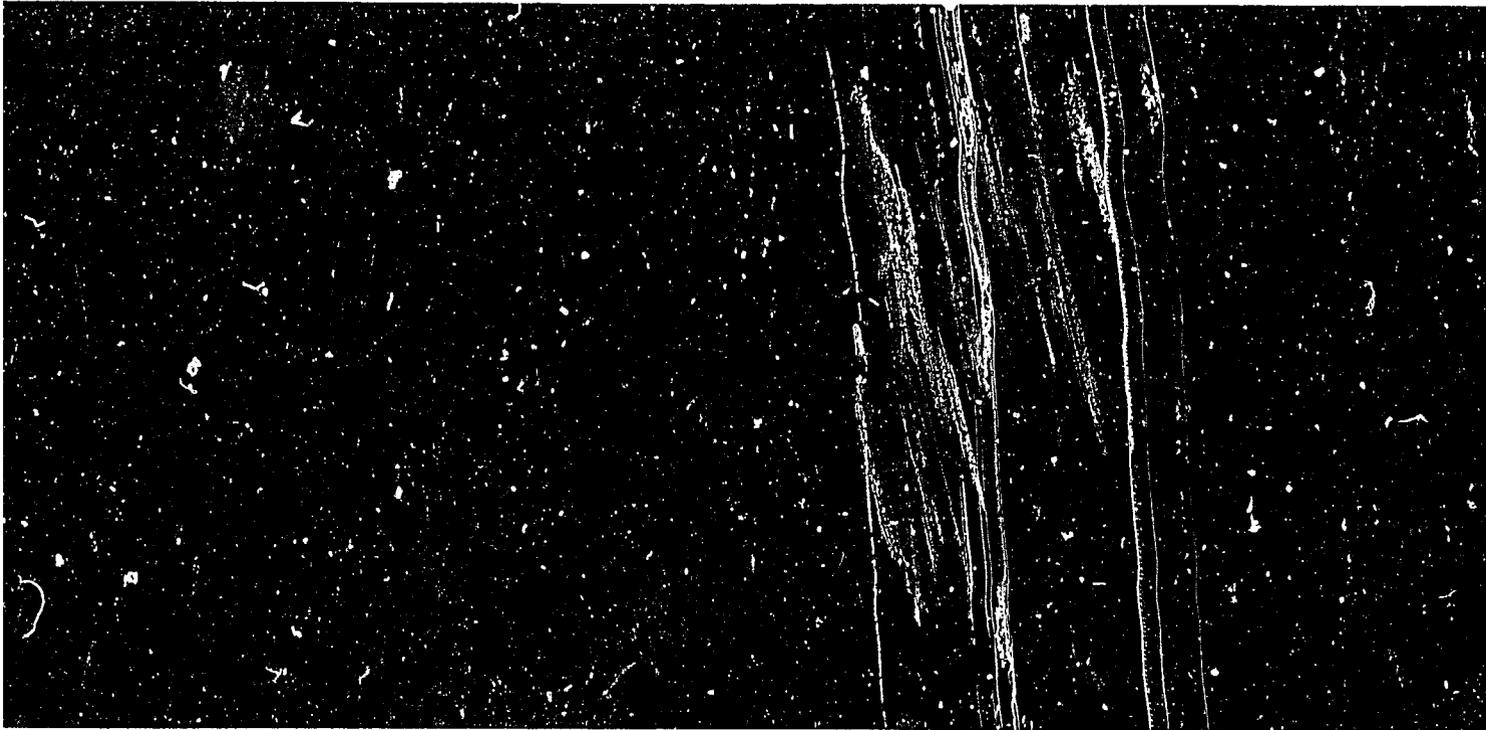


PN-ABH-084
6/13/00

TARGETING FOOD SUBSIDIES



prepared for the
Social Sector Policy
Analysis Project
operated by the
Academy for Educational Development
for the
Agency for International Development
PDPR/SP

FN 127 2 10

69876

TARGETING FOOD SUBSIDIES

Carol S. Kramer, Ph.D.

December 1990

This is a publication of the
Social Sector Policy Analysis Project
Operated by the Academy for Educational Development
Contract No. PDC-0082-C-00-9080-00
Agency for International Development
Bureau for Program and Policy Coordination
Office of Policy Development and Program Review

CONTENTS

INTRODUCTION	1
WHAT ARE FOOD SUBSIDIES AND WHY ARE FOODS SUBSIDIZED?	1
Taxonomy of Food Subsidies and Targeting Mechanisms	2
General Untargeted (Universal) Subsidies	3
Rationed and Targeted Subsidies	3
Pakistan	4
India	5
Food Stamp Programs	5
Sri Lanka	6
United States	7
Self-Targeting Commodities	7
WHY AND WHEN SHOULD FOOD SUBSIDIES BE TARGETED?	8
Scope for Targeting	8
Targeting Specific Groups	9
ARE TARGETED FOOD SUBSIDIES EFFECTIVE?	9
What is Cost Effective?	10
Food Subsidy Financing and Impacts	11
WHAT MAKES A TARGETED FOOD SUBSIDY EFFECTIVE?	11
CHOOSING THE APPROPRIATE TARGETED FOOD SUBSIDY	13
Identify Characteristics of the Food Insecure Population	13
Identify Policies, Constraints, and Needs Critical to Target Groups	13
Select the Best Policy Interventions	14
Initiate Pilot Projects to Test Food Security Strategies	15
Conduct Operations Research and Evaluations	16
CONCLUSIONS	16
REFERENCES CITED	18

INTRODUCTION

Food subsidies have been and are being employed by many nations in the world, both developed and developing. Typically, subsidies are instituted to assist a nation's citizens toward adequate nutritional status or to provide income support in times of need. As world economic conditions and issues surrounding world food production and distribution become more complex, questions of how to better target food subsidies to those most in need are increasingly relevant. The primary question is,

How should seriously limited social resources be allocated to accomplish the most urgent and important social objectives?

This paper defines approaches and key issues related to food subsidies, with examples from nations around the world. It concludes with suggestions for more efficiently targeting food subsidy programs. There are many instances in which food subsidy systems have failed because they benefitted populations that did not need them and, therefore, consumed public resources that might have been more productively spent elsewhere in the economy. However, the paper explicitly assumes that in many cases and for many groups food subsidies have real value: ethically, socially, economically, and politically. The quest to effectively target food subsidies is to make resources stretch as far as possible.

WHAT ARE FOOD SUBSIDIES AND WHY ARE FOODS SUBSIDIZED?

Economic supply and demand conditions and a host of government policies determine food prices. Supply factors include weather, production costs, and transportation costs. Demand factors include consumer preferences and purchasing power. Government policies run the gamut of monetary and fiscal policies.

Food subsidies are particular government-instituted programs under which food is sold or transferred to consumers at prices below the market rate. Through subsidies, governments influence food prices by inserting a wedge between producers and consumers: paying some of the production costs (to the farmer) and/or some of the price of the good (to the

consumer). (Pinstrup-Andersen [8] identified many national programs that subsidized the prices of one or more basic foodstuffs during the 1980s.)

Governments institute food subsidies for many reasons, such as:

- to protect the purchasing power and food consumption of urban consumers,
- to benefit rural consumers,
- to control food supplies (rationing) and regulate national food security,
- to stabilize agricultural sectors, and
- to encourage consumption of specific foodstuffs.

In many countries, general food subsidies are considered to be a part of the government's social contract (5). As such, attempts to dismantle or restrict access to them have been politically difficult. Such attempts have provoked food riots in Egypt, Venezuela, Nigeria, Jordan, Morocco, and Tunisia in recent years.

This paper examines a critical policy dilemma that faces many countries:

How can a government modify longstanding and increasingly unaffordable systems of universal food subsidies, do it in a politically acceptable way, and protect food supplies for those citizens who are both economically and nutritionally vulnerable?

International food subsidy literature identifies at least five objectives of food subsidy programs and their modification to achieve better targeting:

- to ensure adequate nutritional status, food consumption, and food security for all citizens;
- to transfer income to the poor;
- to economize public expenditures;
- to achieve political/social acceptability; and
- to identify administratively feasible measures.

Accordingly, principal requirements of food subsidy policy reform are:

- that better targeted reform measures cost-effectively protect the consumption and real income of nutritionally vulnerable groups, including the poor;

- that the reform save or curb growth in government expenditures, at least in the medium term;
- that the measures engender sufficient political support from powerful groups to be accepted;
- that the measures interfere with markets as little as possible and do not require more public sector involvement than is manageable; and
- that the measures be administratively feasible.

Taxonomy of Food Subsidies and Targeting Mechanisms

Food subsidy programs range from universal subsidies on unrestricted quantities of staples to targeted subsidies on rationed quantities of subsidized staples. Food stamps, which convey monetary value that can be used to purchase food, and feeding assistance programs, which directly transfer food, also are food subsidies.

This paper briefly examines a variety of types of and relations among food subsidy schemes. It touches on systems of untargeted and targeted subsidies for staple foods, food rationing, food stamp programs, and food distribution. The paper also provides examples of food subsidy programs that have been implemented, briefly describes key macro- and microeconomic considerations related to food subsidy and targeting programs, and concludes with a list of some of the questions that might be asked by food policy formulators during their consideration of food subsidy schemes.

General Untargeted (Universal) Subsidies

Many countries have implemented universal untargeted food subsidies for staple foods such as bread, rice, maize, and flour. Nonfood necessities, such as cooking fuel and transportation, may also be subsidized. Universal subsidies are available to all consumers, regardless of income or other criteria. Some universal subsidies are also unlimited, meaning that consumers can purchase as much of the subsidized food or other good as they can afford.

Many countries that have implemented universal, untargeted food subsidies saw subsidy-related expenses skyrocket in the 1970s and 1980s. Escalating costs of the programs were often caused by:

- increased demand that was driven by population growth, rising national income, and subsidy-induced reductions of food prices;
- increasing reliance on imported commodities that became more expensive because of price increases and volatility in international markets; and
- devaluation of national exchange rates, which made imported cereals and other foodstuffs more expensive.

Rationed and Targeted Subsidies

At the same time, or over a period of years, a country may implement both untargeted and targeted food price subsidies. Such implementation may be driven by national or geographical concerns about food security for certain groups of citizens, or by many other factors.

A rationed, **untargeted** food price subsidy makes specified, limited quantities of certain foods available to consumers on a per capita or household basis. Food prices under rationed subsidies may partially include the cost of the program, even if the subsidies are apportioned to all consumers. Examples of rationed, untargeted food subsidy systems are found in Egypt -- rice, sugar, tea, frozen meats, and fish; Pakistan -- wheat; India -- wheat and rice; and Sri Lanka -- rice until 1979.

A rationed, **targeted** food price subsidy makes specified, limited quantities of certain foods available to specific groups of consumers -- frequently, but not exclusively, to low income groups. Countries with rationed, targeted food price subsidies include Bangladesh -- wheat and rice, and the Philippines -- rice and cooking oil (8).

Costs to the government of maintaining rationed food price subsidies are highly unpredictable. Because such systems guarantee households a specified quantity of foods, much of which may be imported, government costs can increase significantly if world prices rise or if exchange rates fall. Weather, general inflation, and other conditions also can influence the cost of assuring rations.

Targeted rationed food price subsidies also can be implemented as food stamp systems, which have both advantages and disadvantages. Food stamps are further discussed on page 5.

The costs to governments of food stamp systems are more predictable than those of other subsidy systems. Because food stamps guarantee a nominal value to consumers, a

government can project costs during a budget period based on the expected numbers of food stamp recipients and the value of the stamps. On the other hand, many food subsidy programs are paid for through foreign assistance or concessionary loans, which may favor rationing schemes over food stamp programs.

Egypt (1), Pakistan (10), India (4), and Morocco (7) have extensive systems of rationed and targeted food subsidies. Following is a case study of experiences in Pakistan and India with ration shops for staple foods.

Pakistan

In Pakistan, an extensive system of ration shops has assured subsidized prices for supplies of staple foods and other necessities at various times and in an orderly fashion since World War II. All wheat was rationed and sold through the shops until the 1960s. For some time thereafter, whole wheat flour continued to be rationed. At times, sugar and vegetable oil were also rationed.

In Pakistan, ration shops are privately owned, but owners must obtain government licenses for their operation and follow strict government regulations. Distribution of licenses is a valuable source of political patronage, which has led to a proliferation of shops. Owners order goods from government warehouses, based on demand and storage costs, which tends to ensure flexible, responsive supply. Owners earn a commission on sales and may keep and sell the grain sacks in which commodities are delivered.

Every consumer receives a ration card and must register with a local shop. Children are entitled to half the rations of adults. Each ration shop is supposed to serve from 3,000 to 6,000

people. Because there are so many, most shops serve 1,000 to 2,000 clients (10). In urban areas, virtually all consumers live within an hour's travel of a ration shop. Access in rural areas is more variable, but still high.

Pakistan has targeted wheat subsidies by geographical means through ration shops by making wheat available only in rural areas that are not self-sufficient in wheat. Ration shops also offer reliable supplies of staples in the hungry seasons at uniform, rather than seasonal, market prices.

Over time, Pakistan's ration system has provided important nutritional benefits to low income consumers who live at or below the brink of malnutrition, particularly in urban areas (10). Although the ration system has not explicitly targeted the poor, the whole wheat flour sold through ration shops appears to be an economically, although not nutritionally, inferior food and therefore has achieved some self-targeting. (An "economically inferior" food is one that is consumed proportionately more by those of lower income than by affluent consumers, who switch to substitute products when their income permits. The term has no nutritional connotation.)

Pakistan's food subsidy system varies with respect to the degree of subsidy paid for rationed staples, and the extent to which the transfers are explicit government subsidies, implicit producer-paid subsidies, or, for sugar, implicit consumer-paid (to benefit producers) subsidies. Overall, Rogers (10) notes that Pakistan's system has performed flexibly, and that the government has effectively controlled costs through its ability to adjust prices and respond to changing economic and weather conditions.

India

India manages food policy through procurement, importation, distribution, and subsidized sales (4). The nation seeks to maintain sufficient and constant supplies of foodgrains, stable prices, and equitable distribution.

In 1981, India maintained about 280,000 fair-price (price-controlled) ration shops that served about 660 million people. Each shop served between 2,000 and 3,000 people (4). Wheat and rice purchases through ration shops increased from 10 million metric tons annually in the 1970s to 16.2 million metric tons in 1983. Grain was purchased from both domestic and international sources.

George (4) found that public distribution of food grains in India provided significant nutritional benefits to the population. If rationing were discontinued in Kerala and Gujarat States, he estimated, average calorie intake would drop 46-224 calories per person in Kerala and 178-196 calories in Gujarat.

In India, the effectiveness of fair price shops in providing access to constant supplies of food at stable prices depends on their proximity to population; procurement and distribution policies and access to supplies; and the capacity to survive in both good and bad years. George (4) notes:

In many rural areas, fair-price shops are superfluous in a good crop year because of the easy availability of foodgrains at reasonable price, and they are ineffective in supplying required quantities in a bad year. . . The viability of retail outlets could be established through a stable

minimum volume or through the distribution of other commodities. Whereas in a major deficit area (such as Kerala) retail outlets for foodgrains alone are viable, in many other rural areas it is necessary to link foodgrain distribution with distribution of other essential commodities.

Food Stamp Programs

Food stamps are coupons with a cash value that may be distributed to a targeted group of consumers for their use to purchase food. Food stamps may be restricted to the purchase of particular food staples, or as in the United States, they may be used for all foods.

Ways of determining eligibility to receive food stamps vary among countries. Some use strict income/means tests; others use administrative or community targeting; and yet others target an identified family member. In the United States, food stamps are distributed to low income people according to income targeting criteria.

Food stamps use the existing marketing system, including retail outlets. Therefore, no or little new governmental infrastructure is needed to support retail distribution. Food stamps are efficient if the existing market outlets cover the territory sufficiently, have a reliable source of supplies, and can provide assured access to all targeted consumers.

Food stamps do not distort relative prices of food products. In Tunisia, for example, where the government considers it important to encourage a market orientation for domestic

and traded food products, using food stamps to maintain the consumption of the poor would be compatible with the development of a variety of new and improved food products designed for the affluent.

Nations have implemented food stamp programs to address a variety of issues. For example,

- Sri Lanka implemented a food stamp program to reform a general food subsidy scheme;
- Colombia, Trinidad and Tobago, and Chile established food stamp programs to subsidize food prices for poor consumers;
- Jamaica activated a food stamp program to compensate needy citizens and those who were expected to be disadvantaged by structural adjustment measures, including currency devaluation and the end of general food subsidies.

Following are descriptions of food stamp programs in Sri Lanka and the United States.

Sri Lanka

The Sri Lanka food stamp program began in 1979. It was implemented to reform the general food subsidy programs for staple foods that had been in place for about 40 years (2,3). The Sri Lanka program is interesting and, indeed, provocative for several reasons.

1. The program represents one of the few instances where a universal untargeted, longstanding food subsidy scheme was changed to targeting without major negative political repercussions. Much of this was due to the planning and political foresight that went into program

conception, phasing, timing, and social communication.

2. On a less positive note, analysis of the distributional effects of the Sri Lanka food stamp program, as compared to those of the previous price subsidy system, showed that the food stamp program failed to maintain the consumption and nutritional status of the extremely vulnerable, "ultra-poor" population group.

The Sri Lanka food stamp program was implemented in three carefully planned steps from 1978 to 1980.

1. The general population, which had been receiving rice and other commodities at subsidized prices, was asked to undergo a self-declared means test in January, 1978. This reduced the roles of those eligible for rice rations by 50 percent; 7.6 million people, whose monthly incomes were less than Rs 300, remained eligible for rations. For those who remained eligible for free rice rations, the ration remained the same.
2. Nineteen months later, in September 1979, the second reform took place. Households were asked to apply for food stamps. The food stamps replaced the rice rations. To establish eligibility, households had to meet the requirements of an income test that was adjusted for household size and composition. Households could use food stamps to purchase rice, wheat flour, bread, sugar, dried fish, milk, and pulses (3). Prices for these commodities were maintained at unsubsidized levels. Households obtained commodities through assigned cooperatives or authorized distributors. Unspent food stamps were bankable at post offices (3).

3. The third phase, 1979-1982, eliminated subsidies on rice, flour, sugar, and infant milk foods (3).

Several traditional targeting mechanisms were dismissed as inappropriate for Sri Lanka, including:

- subsidies for economically inferior foods such as cassava, yams, and coarse grains, and
- geographical targeting and targeting based on the existence of a malnourished child or children in a family.

Instead, a community screening mechanism was installed to evaluate individual claims to food stamp benefits. The approach assumed that a community could accurately judge need, that a community members' screening could be reasonably objective, and that there were no undesirable political ramifications of the process (6).

United States

The U.S. food stamp program began as a demonstration project in 1959 (there were pilot programs as early as the 1930s) and expanded nationwide in 1975. Today, more than 20 million people receive benefits totalling more than \$13 billion annually. The food stamp program seeks to

- provide food assistance to needy persons, and
- help the U.S. Department of Agriculture's price support operations by disposing of surplus commodities.

In the U.S. Congress, support for the food stamp program has depended on a coalition of representatives of consumer and producer interests.

In the United States, local and state governments administer daily operations of the food stamp program, with financing and oversight from the federal government. Persons seeking food stamps apply at a county office (frequently located next to the Department of Social Services or welfare offices). To receive food stamps, households must pass an income and assets test and must register for work if not elderly, disabled, or responsible for a child younger than six years of age. Neither the value of a vehicle used to generate income nor a house is counted in the assets allowed. Eligibility is established for a period of months subject to renewal. Applicants must reapply to maintain eligibility. Records of income and expenses for child care, medical services, and shelter and utility expenses must be provided to verify eligibility to receive benefits.

Self-Targeting Commodities

Some commodities are self-targeting to specific groups of people. Economically and culturally less desirable foods -- whole wheat flour in Pakistan, cassava in Brazil, potato in Ireland -- often are the staples of lower income groups. By reducing the prices of such foods, a government can automatically help poor people without subsidizing the more economically secure population.

If no economically less desirable food is available, then other targeting mechanisms may be necessary. In Mali, Rogers and Lowdermilk (11) found that self-targeting millet, a less desirable food, in urban areas was ineffective because imported cereals were seen as being more desirable. Similar results were found in Senegal and other West African countries that tried to reduce reliance on imported rice and wheat products through price policies.

In these countries, cereals consumption patterns of all income groups appeared very similar. The convenience associated with purchasing and preparing imported rice reduced the substitutability of millet for rice. Labor, preparation time, and costs associated with cooking millet, particularly in urban areas, made its true economic costs significantly

higher than the monetary price of the grain.

Combining several mechanisms such as supplying rations of mildly less desirable staples to rural consumers through fair price shops in deficit areas may help confine purchases of the intended food to the targeted consumer.

WHY AND WHEN SHOULD FOOD SUBSIDIES BE TARGETED?

In many nations, food subsidies represent a significant proportion of all government expenditures. Egypt, for example, spent up to 25 percent of its annual budget between 1970 and 1981 on food subsidies; more than 90 percent of its population benefitted. In Tunisia, in 1989, food subsidies represented 8-9 percent of government expenditures.

Food subsidies are usually targeted for two reasons:

- to cost-effectively transfer benefits to members of society who are most in need, and
- to reduce or stabilize government expenditures for supporting subsidies.

For example, many Latin American nations are facing critical food security issues that will encourage targeted food subsidies. Political and economic choices and foreign indebtedness have placed many governments under extreme economic pressure, thus making universal food subsidies increasingly unaffordable.

Governments face burgeoning costs of servicing debt that will necessitate massive belt-tightening and strictures on government

employment and social programs. Structural adjustment and stabilization normally encompass policies designed to control inflation: namely currency devaluation, which makes imported food more expensive; reducing domestic government expenditures, which cuts employment, investments in social services, and infrastructure development; and an increasing emphasis on producing for export to generate foreign exchange.

Emerging knowledge suggests that the design, timing, and phasing of compensatory programs to assure the food security of the most vulnerable groups of people -- also the most politically volatile groups -- can be critical to the success of the policy packages. In addition, policies must be chosen wisely to maintain the nutritional well-being and health of the most vulnerable members of society.

Scope for Targeting

Considerable scope for targeting exists where universal, untargeted subsidy systems are in place. Targeting may be desirable if:

- subsidies apply to all consumers irrespective of income;

- subsidized commodities are consumed in great quantities by upper income groups;
- poorer segments of the population experience calorie deficiencies despite the existence of food subsidies;
- the fiscal and macroeconomic implications of the subsidy scheme have a negative impact on the agricultural sector or other sectors of the economy; or
- increasing food prices to correct distortions and encourage production could have severe impacts on lower income groups.

Rationed, targeted food subsidy programs do exist. Lessons learned through their application provide some principles that will be useful to donor agencies to consider as they design policy and program assistance strategies for nations around the world.

Targeting Specific Groups

Even with political will, it is often difficult to target benefits to low income groups that are

considered deserving while excluding those that aren't.

In many countries, income levels are difficult to verify. Problems include lack of standard income and asset records, difficulties in valuing in-kind income, unwillingness to disclose true income, seasonal income, etc. Also, many countries may lack the resources to administer verifiable income reporting.

Numerous proxy methods exist for identifying appropriate groups for food subsidies, including:

- targeting by geographic area,
- targeting by season,
- targeting by wealth indicator (excluding persons who own land, cars, other assets),
- targeting on the nutritional status of a family member, and
- administrative or community targeting based on evaluated need

ARE TARGETED FOOD SUBSIDIES EFFECTIVE?

Food subsidies are effective if they help a population achieve food security cost-effectively. Food security is the capacity of nations, regions, communities, households, and individuals to feed themselves adequately. It is a multilevel, multidimensional concept.

Macroeconomic policy, such as exchange rates, balance of trade, government deficits, external debt, and fiscal and monetary policies influences food security at the national level. The national resource and technology bases also are important, as are sectoral policies in agriculture and energy.

At the regional or community level, reliability of supplies, price stability during periods of shortage, and the efficiency of the marketing system each influence food security. Equally important are entitlements to receive food generated by income opportunities and cultural practices.

At the household level, economic factors such as employment and wages of family members, other revenues, and the prices of food and other essentials, such as housing, fuel, and health care, affect household ability to purchase food. Families' choice of agricultural

enterprises, and sources and control of income all influence household food security and that of individual household members, particularly children.

What is Cost Effective?

Cost effectiveness is a relative concept. It is a comparison of the degree to which a goal or goals is attained with the costs of the accomplishment and, ideally, a consideration of who bears the costs. Thus, alternative policy approaches and policy instruments can be compared based on level of cost and the distributional impacts of achieving the goal.

To compare policy, program, or project alternatives, it is critically important to establish and agree upon a goal or goals. Without such a consensus -- for example, that a policy is to alleviate (an operational definition) poverty of people at the lowest ten percent of the income distribution -- comparing alternative policies is like comparing apples and oranges. If a goal or a set of goals can be agreed upon, then measures of effectiveness and their costs can be estimated, based upon an assessment of target efficiency and the costs associated with achieving that efficiency.

Pinstrup-Andersen (9) offers a valuable framework for analyzing social and economic effects of food subsidy policies. The framework proposes consideration of variables that may absorb or reflect impacts of the policy package selected. It reflects the complexity involved in both designing and assessing or evaluating a subsidy policy or program. Andersen's

framework includes the following variables. Effects on

- food prices
- household incomes
- household security
- intra-household income control
- household food consumption
- malnourished individuals
- nutritional status
- human capital
- fiscal costs
- wages
- the agricultural sector
- inflation
- foreign trade and exchange
- output and employment.

This list of policy effects includes both target-effectiveness variables and macroeconomic variables, such as effects on inflation, food prices, foreign trade, or output and employment. The macroeconomic and sectoral variables are generally not the intended target of the subsidy policies, but they may be significantly influenced during the process of targeting food subsidies.

Even conceptualizing the target of the proposed policy -- malnourished individuals, particular family members, households, or communities -- requires penetrating thinking. Whereas adequate food security for all is the ultimate goal, operational choices must be made where targeting is concerned. Designing a targeting policy begins with understanding the problem and then identifying the policy alternatives necessary to solve it.

Food Subsidy Financing and Impacts

Food subsidies may be explicitly financed by a government, financed implicitly by producers, or by a combination of these approaches. The method of financing has important implications for the health of the agricultural sector and the overall economy.

If subsidies are implicitly financed by keeping prices to agricultural producers at below international market rates, they become a disincentive to growth in the agricultural sector. If subsidies are financed explicitly, they have an impact on the government deficit or inflation and/or displace other government and private sector investments that might have been

made. Food subsidies can also have profound effects on the foreign and industrial sectors of an economy. Scobie (12), for example, found that a 10 percent increase in expenditures on Egyptian food subsidies increased inflation rates by more than 5 percent, decreased international assets by 2 percent, and devalued the free market exchange rate by more than 3 percent. Inflation can exert extremely damaging effects on the poor as they purchase nonfood items, even if food prices remain low.

On the positive side, food subsidies have increased food consumption and improved the nutritional status of the poor, which benefits the health and productivity of people, economies, and societies.

WHAT MAKES A TARGETED FOOD SUBSIDY EFFECTIVE?

Many factors influence the effect of food subsidies on the real income and/or the consumption of the poor. First, *the poor* is not a homogeneous group. Rather, *the poor* must be disaggregated into all the relevant groups in a particular society – by region, by urban/rural location, by age, by sex, by income, by employment, by health or nutrition status, or by connection with particular institutions.

Then, the degree of targeting intended and the program design and implementation are extremely important. Choosing the food(s) or other commodities to be subsidized is also important. The most effective choices may vary over time. For example, a food that is very important to low income consumers but that is not liked nor heavily consumed by more affluent consumers is a desirable target for a subsidy because it tends to be self-targeting.

There are a limited number of food subsidy schemes that have effectively targeted low income groups in developing countries. Although understanding of what makes an effective targeting scheme is limited, the literature does highlight some advantages, disadvantages, and implementation factors related to rationed and targeted price subsidies.

- Rationing food helps protect government budgets. Without targeting, however, ration systems can be extremely expensive because they supply food at below market prices to all citizens.
- The source of funding for food subsidies has important macroeconomic, sectoral, and microeconomic effects. Implicit subsidies penalize producers and discourage agricultural productivity.

Explicit subsidies are expensive and their cost is volatile as international markets fluctuate. Foreign assistance or concessional loans that are more available for rationed food subsidies than for general economic assistance may discourage food stamp or other programs.

- In many nations, rationed food subsidies have assured food security for consumers through providing predictable supplies of basic foods.
- Ration distribution may occur in both government fair price shops or through the private marketing system. In each case, a system for identifying and monitoring the eligibility of ration recipients and entitlements is necessary. It is also essential to monitor the outlets to ensure that consumers receive the subsidized food to which they are entitled.
- If ration distribution occurs through government outlets, the effectiveness of the system depends on factors including location, hours of operation, need to wait in line, affordability, quantities available, etc. If no process or infrastructure exists for distributing rations, it may be expensive for a government to create and supply such a system.
- If rations are distributed through retail outlets, the system's cost-effectiveness depends on how distributors are supplied with subsidized products and how they are monitored to prevent fraud.

- Food stamp programs have important advantages and disadvantages. They may be effective in countries that seek to transfer purchasing power to low income consumers, but wish to use the private marketing system and maximize flexibility of the agricultural and food sector to respond to consumer choices. With food stamps, it is not necessary to create or manage a government marketing system, or for the government to distribute commodities.

Food stamps are easy to distribute, but, to limit fraud, it is important to monitor retailers' cashing in of the stamps. At this point, stamps must be removed from circulation and not recycled for cash value within the population. A sophisticated banking system is not necessary (Pinstrup-Andersen, personal communication), but there must be honest persons to monitor the cashing in of the stamps and incentives to encourage them to stay honest.

Perhaps the most critical policy consideration in designing and implementing a food stamp program is the administrative and political capacity to identify and target means levels. Determining if records, or other means, exist to demonstrate income or assets and if enough literate, numerate staff are available to administer such a program is critical to deciding if a food stamp program can be successfully implemented.

Sometimes, implementing a combination of approaches is best; for example, using food stamps in fair-price shops that sell foods consumed primarily by the poor (13).

CHOOSING THE APPROPRIATE TARGETED FOOD SUBSIDY

The following sections provide guidelines that policy makers can use in choosing the most appropriate targeting strategy for food subsidies. The sections form a checklist that might be used as a guide through the decision making process.

Identify Characteristics of the Food Insecure Population

The "poor" is not a homogeneous group. Therefore, when creating policy for targeting food subsidies, it is necessary to identify and characterize the multiple categories of the poor or ill who may be food insecure and the specific conditions they face. Groups targeted to receive income, consumption, or nutritional support through food subsidies or other mechanisms can be identified through various means and according to diverse criteria. Poverty, low food intake, or poor nutritional status are each associated with need. For each identifiable group, different specific policy measures may be the most appropriate, feasible, and cost-effective.

In urban areas, problems of poverty are exacerbated by overcrowding in unhealthy conditions, served by substandard public services. And, poverty may be disproportionately a problem of certain groups, such as very young adults who have flocked to urban slums in search of respite from poverty in rural areas, or children left to fend for themselves on the streets. Yet, in cities, compensatory programs have a ready, concentrated clientele; cost-effective mass communication strategies are available for reaching large groups; and the unit cost of providing goods or services may be relatively low due to economics of size or scale.

In rural areas, populations are more dispersed. Food insecurity may be agriculturally related – poor crops due to weather conditions, unavailability of agricultural inputs or credit, lack of markets for production. Or, an exclusive policy focus on export production (coffee, sugar, oranges) may reduce food crop diversity and cause food shortages or nutritional imbalance for families. Research increasingly suggests that the sources and stability of household income in rural areas influence both who controls that portion of income, and how the family fares nutritionally.

Identify Policies, Constraints, and Needs Critical to Target Groups

After identifying the key characteristics of the groups to receive targeted food subsidies, it is necessary to identify and describe the:

- macroeconomic and sectoral economic policies that have greatest impact upon them,
- the nature of households and the role and status of different family members,
- their health and sanitation constraints, their educational needs, and
- their other material, locational, or knowledge deficiencies associated with food insecurity.

A case-by-case analysis is necessary to identify and carefully describe common situations of needy households. For example, agricultural pricing policies that discriminate against producers while benefiting urban consumers may exacerbate poverty in rural areas. Similarly, overvalued exchange rates in a

country that might otherwise export agricultural products discriminates against rural farm households.

Macroeconomic policies that inflate the cost of living hit poor consumers especially hard. For example, agricultural export policies and investment strategies may not take into consideration the nutritional needs of the population or the control over agricultural and other resources that exists in rural areas. As an illustration, if export policies change women's employment status by favoring investment in export crops that are largely controlled by men, then changes in hours worked and by whom, remuneration, and control over income may occur with subsequent effects on the household and its food consumption.

From another point of view, health and sanitation constraints – exacerbated by educational and other limitations – may diminish the welfare effect achievable by food subsidies or other nutrition-related programs. For example, infants and children weakened by repeated diarrhea cannot effectively use the nutrients supplied by a food subsidy or nutrition enhancement program. This does not indicate that the programs are ineffective. It does indicate that they are not always sufficient to overcome all limitations.

Select the Best Policy Interventions

After identifying the target groups and defining their characteristics, policy makers need to select the best choices for policy interventions. In addition to target group characteristics, the interventions should reflect:

- development literature and experience;
- interviews with policy makers and clientele groups;

- results of an assessment conducted by a team comprised of agricultural and food economists, a sociologist/anthropologist, a nutritionist with public health skills, and a policy and public spending analyst; and
- opinions of a task force or work group that represents the government, involved economic sectors, other service organizations, and major target groups.

Tunisia provides an illustration of how a preliminary assessment may be made of policy options for appropriately targeting subsidy benefits.

Tunisia has a well-entrenched system of food and agricultural subsidies. Although the Tunisian system is neither as costly nor as extensive as systems elsewhere, it does represent a growing component of government expenditures. Also, the system has been criticized for benefitting relatively greater numbers of affluent than impoverished Tunisians. Nevertheless, the system does provide critically essential benefits to poor Tunisians, many of whom spend most of their income on food, even when assisted by subsidies.

Many policy makers recognized that, in the wake of structural adjustment and general macroeconomic and sectoral reform, an attempt had to be made to maintain the purchasing power and food security of those in need. One way to do this was to target food subsidy benefits to lower income consumers. Following are the results of a study that provided recommendations for Tunisia to follow in revising its subsidy system.

The first phase of the study examined the costs and benefits, the disadvantages and advantages, of various means of targeting food subsidies or otherwise reinforcing or increasing

the food security or income-generating capacity of low income consumers. The results suggested that the Government of Tunisia should move toward a mixed system of food subsidies and mechanisms for enhancing income generating opportunities. Such a system would include:

- gradual movement toward increased and more flexible cereal prices (Cereal product prices should be raised differentially, with those most consumed by the poorest increased the least.);
- phase-out of sugar and milk subsidies, except for milk provided through school lunch and other feeding programs;
- initiation of product research and development programs for new cereal, cooking oil, and dairy products (Such a program could develop new, high-quality versions of now-subsidized foods that would appeal to higher income consumers. It is believed that these new, unsubsidized products would attract the consumption of the more affluent and reduce the need to subsidize cereals and other products at the current scale.);
- pilot test food stamp programs in representative urban areas through, for example, the existing social service delivery system, using explicit, objective eligibility criteria;
- develop a targeted system to allow access to subsidized food in rural areas;
- develop decentralized programs tailored to the specific income-generating and food needs of rural people (Poverty is disproportionately associated with rural

residents in Tunisia, particularly in the western and southern regions.).

Initiate Pilot Projects to Test Food Security Strategies

It is understood that these food security strategies would be developed in close collaboration with relevant nutrition, health, and agricultural policy makers.

There is usually no substitute for experience in assessing how a food subsidy or food targeting policy or program will perform. There may be extreme risks in adopting new untested policies. Thus, developing a pilot project or policy frequently affords valuable feedback and insights that can and should be exploited.

In Tunisia, for example, self-targeting through changing the quality of bread or other staples had significant appeal. A pilot study was therefore recommended to conduct product development and market research to learn if the products would actually self-target.

In Jamaica, analysis had serious misgivings about the possible adverse effects of instituting too large a food stamp program too fast. Without experience, there was little knowledge of how serious the bottlenecks associated with commodity supply or personnel to administer the program might be.

There also is the question, over which much debate has raged, of how, when, and how much to raise the prices of staple foods when it must be done. Experience suggests that precipitous price increases that have been sprung on an unsuspecting populace have

frequently resulted in food riots and policy setbacks. Step-wise action and maximum use of feedback generated in the process can be incredibly valuable in preventing such problems.

Conduct Operations Research and Evaluations

It is important to include mechanisms for ongoing operations research and evaluation in

food subsidy and food targeting programs. Using these techniques clearly identifies and justifies those strategies and components of strategies that perform best under field conditions. Results of ongoing evaluations help policy makers refine and redesign programs to reflect changing needs and economic situations. Evaluations also can be a major element in participatory training sessions at which new plans and strategies for expanded area coverage are developed.

CONCLUSIONS

As the preceding sections indicate, food subsidies and their targeting must operate within a complex set of relationships with other government policies, socioeconomic conditions, commodity producers and processors, and international markets.

When a government determines that food subsidies are necessary, or that existing subsidies should be adjusted to reflect current reality, a detailed and logical process should be followed for designing the subsidies. Some questions that might be asked by policy formulators include the following.

1. Why is a food subsidy or adjustment necessary?

- to ration and equitably distribute a scarce food?
- to provide food security to the economically insecure?
- to lessen the economic burden on government of an existing subsidy?

2. What impact will the subsidy or adjustment have on related entities?

- on the national economy?
- on the national/local political situation?
- on farmers who grow the food to be subsidized?
- on consumers of different types?

3. Should the subsidy be general (to benefit all citizens of a nation) or targeted?

4. How should the subsidy be targeted?

- by income?
- by nutritional status?
- by region within a country?
- by season?

5. How should the subsidy be implemented and managed?

- as a food stamp program?
 - through ration shops?
 - through self-targeting?
6. **Has a similar subsidy been implemented in another nation under comparable circumstances?**
- was it successful?
 - what lessons were learned that the new subsidy should reflect?
7. **How can the subsidy's effectiveness be evaluated, and how can the subsidy be**

adjusted to respond to changing food security and economic conditions?

The answers to these and many other questions will help guide the development of a socially responsible and responsive, cost-effective, and implementable food subsidy program. Above all, policy formulators and advisors should seek to balance subsidy programs within the total context of a nation and a society.



REFERENCES

1. Alderman, Harold M., Joachim von Braun and Sabr Ahmed Sabr. 1982. *Egyptian Public Food Programs Studies Report on Task 1 - Egypt's Food Subsidy and Rationing System: a Description*. Washington, D.C., International Food Policy Research Institute.
2. Edirisinghe, Neville. 1988. "Food Subsidy Changes in Sri Lanka: The Short-Run Effect on the Poor," in *Food Subsidies in Developing Countries: Costs, Benefits, Policy Options*. Per Pinstруп-Andersen, editor. Baltimore, the Johns Hopkins University Press for the International Food Policy Research Institute.
3. Edirisinghe, Neville. 1987. "The Food Stamp Scheme in Sri Lanka: Costs, Benefits, and Options for Modification." Washington, D.C., International Food Policy Research Institute. Research Report 58.
4. George, P.S. 1988. "Costs and Benefits of Food Subsidies in India," in *Food Subsidies in Developing Countries: Costs, Benefits, Policy Options*. Per Pinstруп-Andersen, editor. Baltimore, the Johns Hopkins University Press for the International Food Policy Research Institute.
5. Hopkins, Raymond F. 1988. "Political Calculations in Subsidizing Food," in *Food Subsidies in Developing Countries: Costs, Benefits, Policy Options*. Per Pinstруп-Andersen, editor. Baltimore, the Johns Hopkins University Press for the International Food Policy Research Institute.
6. Kramer, Carol S. and Lawrence M. Rubey. 1989. "Lessons Learned from USAID Food Policy Programming: the Consumption Effects of Agricultural Policies Project." Washington, D.C., National Center for Food and Agricultural Policy, Resources for the Future.
7. Laraki, Karim. 1989. "Food Subsidies: A Case Study of Price Reform In Morocco." Washington, D.C., The World Bank. LSMS Working Paper Number 50.
8. Pinstруп-Andersen, Per, editor. 1988. *Food Subsidies in Developing Countries: Costs, Benefits, Policy Options*. Baltimore, the Johns Hopkins University Press for the International Food Policy Research Institute.
9. Pinstруп-Andersen, Per. 1989. "The Role of Food-Linked Income Transfers in Efforts to Alleviate Malnutrition." Draft. Prepared for International Food Policy Research Institute Poverty Research Conference, Airlie House, Virginia, October 25-18.
10. Rogers, Beatrice L. 1989. "Consumption Effects of Agricultural Policies: What Do We Know?" A Review of USAID/Nutrition Economics Group Research. Report prepared for the Nutrition Economics Group, Office of International Cooperation and Development, U.S. Department of Agriculture and the Office of Nutrition, Bureau of Science and Technology, U.S. Agency for International Development.

11. Rogers, Beatrice L, and Melanee L. Lowdermilk. 1988. "Food Prices and Food Consumption in Urban Mali." Report prepared for the Nutrition Economics Group, Office of International Cooperation and Development, U.S. Department of Agriculture and the Office of Nutrition, Bureau of Science and Technology, U.S. Agency for International Development.
12. Scobie, Grant M. 1983. "Food Subsidies in Egypt: Their Impact on Foreign Exchange and Trade." Washington, D.C., International Food Policy Research Institute. Research Report 40.
13. Timmer, Peter; W.P. Falcon; and S.R. Pearson. 1983. *Food Policy Analysis*. Baltimore, Johns Hopkins University Press.