

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Public Food Distribution System and Food Security of the Poor: The Indian and Chinese Experience Compared ¹

Zhang-Yue Zhou ^a and Vasant P. Gandhi ^b

^a The University of Sydney, Orange NSW 2800 Australia Email: zzhou@oac.usyd.edu.au ^b Indian Institute of Management, Ahmedabad Gujarat, India 380015 Email: gandhi@iimahd.ernet.in

1. Introduction

This paper compares the public food distribution systems practised in India and China and examines whether a public food distribution system is necessary to ensure the food security of the poor in developing countries.

The idea of food security has been circulating for a long time and the right to adequate food and to be free from hunger has been repeatedly affirmed and reaffirmed in a number of documents adopted by the United Nations (e.g., the Universal Declaration of Human Rights in 1948, the International Covenant on Economic, Social and Cultural Rights in 1966, and the Rights of Child in 1989). Despite the enormous efforts in the past decades by various international organisations, government organisations and non-government organisations, unfortunately, today there are still more than 800 million people throughout the world, and particularly in developing countries, who do not have enough food to meet their basic nutritional needs, and 200 million of which are children under five years of age. This led the Food and Agriculture Organisation (FAO) of the United Nations to assembling a World Food Summit in November 1996 in Rome, in which 194 countries took part and during which the Rome Declaration on World Food Security was promulgated.

Among the 800 million who suffer from starvation throughout the world, a large portion is from India and China. In India, there are about 320 million people (rural 244; urban 76) living below poverty lines as defined by the government (Rs 228.9 or US \$7.3 equivalent per capita per month for rural people and Rs 264.1 or US \$8.5 per capita per month for urban people; cf. US \$31.67 per capita per month, the poverty line set by the United Nations for developing countries) (Government of India 1999, p. 146)². There are about 80 million people in China (rural 65; urban 15) living below poverty lines (¥44.2 or US \$5.4 equivalent per capita per month for rural people; poverty line for the urban poor has just been recently introduced and no unique standard is available but it is decided by a city government. It is around ¥160-220 or US \$19.5-26.8 per capita per month) (China National Conditions and Power 1996, various issues). It is these poor people who have great difficulty in obtaining an

¹ Paper presented at the 44th Annual Conference of the Australian Agricultural and Resource Economics Society, the University of Sydney, Australia, 23-25 January 2000. This project is funded by a research grant of the University of Sydney - Orange, to which we are most grateful.

² 1993-94 figure. Figures for subsequent years are not yet available (Government of India 1999, p. 146).

adequate food for basic human requirements and who need to be helped by some sort of public food distribution system administered by the government.

Both the Indian and Chinese governments have used a public distribution system (PDS) to distribute food to ensure that people receive a fair amount of food ever since the late 1940s or early 1950s when they encountered severe shortages of food. In India, the operation of the PDS was somewhat *ad hoc* before the 1970s, but since then its operation has been regular. In principle, both the urban and rural population and the rich and poor are covered by the PDS and are entitled to purchase subsidised food from the PDS. In China, a PDS was implemented till mid 1993 which was in favour of the urban people and all the registered urban population, irrespective of wealth, was covered by the ration system. All rural people, except households with a deficit in grain and non-grain producing farmers, were not entitled to subsidised food from the PDS.

The PDSs without targeting unnecessarily subsidise many who are not poor and have become very costly to operate. The increasing subsidies attracted many criticisms of the systems. In response to the pressures against the subsidy expenditure, the two governments have acted differently: India chose to reform its PDS with a focus on targeting the poor while China chose to remove its PDS.

It is a fact that, after decades of economic development, majority of the consumers in both countries have enjoyed an increased income and they can afford the purchase of their food without a subsidy. However, is there still a role for the PDS to ensure the food security of the poorer sector of the society? Recently, a number of studies have been carried out to address the issues of effective targeting and food security of the poor for India and China (see, for example, Dev and Suryanarayana 1991; Ahluwalia 1993; Radhakrishna 1996; Gandhi and Koshy 1997; Zhou and Chen 1997; Zhu 1997) but on a single country basis. Comparing the Indian and Chinese practice in their looking after the food security of the poor should provide experiences and lessons useful not only for India and China but also for other developing countries where food security of the poor is a concern.

In the next section we present a discussion related to the features of food and the concept of food security. We then in Section 3 highlight the PDSs practised in India and China and the reforms brought to the PDSs in the 1990s. This helps us to compare the Indian and Chinese experiences with a view to arguing if a PDS is still necessary to look after the food security of the poor, which is the subject of Section 4. In Section 5, we address some efficiency concerns related to the operations of a PDS. A summary and concluding comments are given in the final section.

2. Features of Food and the Concept of Food Security $^{\rm 3}$

Since the early 1970s when FAO first gave the concept of food security a place in the international legal order, food security has increasingly been in the focus of food policy discussions. It provides a theoretical framework for food policy formation, planning and implementation.

The issue of food security has drawn so much attention because in today's world food is still a central issue for many poor people. This is particularly the case in developing countries for the rural poor with insufficient land and for the urban poor with insufficient food purchasing power and often with neither work nor unemployment benefits. To these poor people, the right to food and to be free from hunger is the most concrete of economic rights; it has an immediate appeal to deeply-rooted human feelings because food is a matter of life and death.

2

³ The discussion in this section is based on Spitz (1985) and Oshaug et al. (1994).

Among the necessities of life, food has the following distinctive features (Spitz 1985):

- Food has a special time dimension. This derives from the fact that human beings need to eat every day. One cannot live many days without food and certainly cannot perform manual work during a long time of fasting. Food has to be obtained within much stricter time constraints than any other necessities of life.
- Food has a nutritional dimension. Some nutritional elements should be taken as part
 of the diet if not every day then at least over a short period of time, because the
 body does not effectively store many such nutritional elements.
- Food has a socio-cultural dimension. Not everything edible and nutritionally satisfactory is socially, culturally and psychologically acceptable.
- Food has an economic dimension. Most of the food items consumed are available in the market at a price.

Largely in accordance with these special features of food, scholars have over the years developed a normative basis for food security (Spitz 1985; Eide et al. 1985, 1986; Oshaug 1992, Oshaug et al. 1994) which may be depicted using the following chart (Figure 1).

[Figure 1 here.]

The major subdivision of food security is expressed in terms of adequacy of the food supply and stability of both food supply and access. This points to the need for attention both to the features of the food itself, and to the range of factors determining security of food supply and access.

Adequacy of the food supply means that (1) the overall supply should potentially cover overall nutritional needs in terms of quantity (energy) and quality (provide all essential nutrients); (2) the food is safe (free of toxic factors and contaminants) and of good food quality (taste, texture, etc.); and (3) the types of foodstuffs commonly available (nationally, in local markets, and eventually at the household level) should be culturally acceptable (fit the prevailing food or dietary culture).

Stability of the supply and access to food implies environmental sustainability and economic and social stability. Environmental sustainability implies that there is a judicious public and community management of natural resources which have a bearing on the food supply. Economic and social sustainability addresses conditions and mechanisms securing food access. This concerns a just income distribution and effective markets, together with various public and informal support and safety nets. It could be public social security schemes, but also numerous forms of community transactions, self-help and solidarity networks.

The above definition of food security is broad in scope and 'normative'. It clearly addresses the sub-goals that must be attained for food security to be achieved as a true development goal. Each element can be given a precise content in the given situation through the identification of local standards against which deviations can be assessed.

Food security can be addressed at various levels: international, national, regional, a stratum of the population, or at the family level. In this paper, we focus on a stratum of the population: the poor's food security. Among the various aspects of food security as identified in the above framework, those other than "stability of food access", although important, can hardly be a primary concern to the poor. "Stability of food access", on which this paper's discussion is centered around, is the core to the poor and is the utmost concern of the poor's food security. A properly designed PDS helps to ensure the stability of the poor's access to food.

3. Public Food Distribution Systems in India and China

3.1 The PDSs up to the Early 1990s

3.1.1 India

Foodgrain distribution in India is done through a combination of the private market and the "Public Distribution System" (PDS). The origins of the PDS can be traced back to the Second World War period. Small deficits in foodgrain supply already existed but were met from imports. When war broke out, grain imports became difficult and prices rose sharply (Suryanarayana 1985, p. 20). To ensure an equitable distribution of available supplies, rationing was introduced in 1942.

Supplies for rationing were met by domestic procurement and imports; distribution was done through ration shops. After the war, from December 1947 the government reverted to decontrol. However, prices increased steeply by July 1948 and in September 1948, control was again introduced. A new scheme of distribution, a fair price shop system, was introduced and the main operation become one of the lowing market prices through large supplies in the market.

In 1965 the Food Corporation of India was set up with the goal of handling procurement, distribution and building a buffer stock. In the same year, the Agricultural Prices Commission (now Commission for Agricultural Costs and Prices) was set up to advise the government on prices to be paid to the farmers. Around 1967/68, the name of the "fair price shop" scheme was changed to the "Public Distribution System" but the role and organisation of the system remained unchanged.

Two major objectives of the PDS are: (1) to mobilise food supplies and (2) to prevent undue rise in food prices, thus ensuring minimum daily food supplies to millions spread over a huge area where many market imperfections prevail. These objectives remain little changed.

The PDS is jointly run by the central government and state governments (including union territory administrations). While the responsibility of the central government (through the Food Corporation of India) is to procure, store and transport grains from purchase points to central godowns (warehouses) across the country, the responsibility of state governments is to transport these commodities from the central godowns and distribute them to consumers through the network of fair price shops.

Fair price shops are generally owned either privately or cooperatively and get a commission on sales. These shops are licensed by state governments and distribute principally food items (wheat, rice, sugar, and edible oil) to customers at fixed prices. A shop covers about 2000 people. All people, whether rich or poor, urban or rural, are entitled to draw supplies from fair price shops. In 1998, there were about 450 000 shops – some 75% in the rural areas. The grains distributed in these shops is of fair-to-average quality. Many well-off people turn to the open market for grains of higher quality at a higher price.

Pricing is crucial for PDS. The central issue price is based on the current and anticipated open market prices. If the issue prices are set too high, the PDS does not justify its existence; if they are set too low, a heavy burden falls on it. If the issue price of grain is lower than its cost (procurement, storage, distribution, wastage, etc.), a government subsidy results. Since the early 1970s, procurement prices were increased year by year in order to ensure a remunerative price to the farmers but the prices at which the PDS dispatched the grains could not be raised correspondingly. Despite periodical revisions of the central issue prices, they were generally kept below the cost of grains. The difference between the issue price and cost of grains is borne by the government by way of food subsidy. The subsidy has increased from

Rs 67 million in 1970/71 to over Rs 10 billion by 1984/85 and Rs 25 billion by 1989/90 in current prices (see Table 1). The rapidly increasing subsidy attracted much attention and criticism (Parikh 1994; George 1996).

[Table 1 here.]

3.1.2 China

When the Communist Party of China came to power in 1949, there was an overall food shortage in the country as a consequence of decades of wars. The new government took various measures in order to promote grain production, crack down on hoarding and speculation, and establish and strengthen state grain organisations. By the end of 1950, the grain situation was basically brought under control and state grain organisations established a commanding position in the grain market.

China started its First Five-Year Plan in 1953. With economic reconstruction underway on a large scale, the demand for grain outpaced availability. In October 1953, it was proposed that the government should procure grain directly from rural areas and supply it to consumers in urban areas through a ration system. This scheme was endorsed by the government and implemented from December 1953. Under this scheme, state grain agencies would be the sole buyers and sole sellers in the grain market. This scheme was called the "Unified Grain Procurement and Sale System", and the sale part, the "Unified Grain Sale System" (UGSS).

The UGSS covered three kinds of buyers: (1) the non-agricultural population (urban) who were issued with grain coupons, (2) the agricultural population who were engaged in non-grain businesses or did not produce enough grain, (3) other grain users (e.g., restaurants, bakeries, and food-processing factories or factories using grain as inputs).

The grain coupons were an important element of the rationing system. They could be used in government grain stores, restaurants, and manufactured food stores, etc. Usually they could only be used within the issuing area (e.g., a city or a province) but a local grain coupon could be exchanged for a more general one (i.e., issued by a higher level government) to facilitate travelling beyond the local area. The local grain coupons were usually issued monthly, could be used any time or sometime for a specific period, and the proportion of fine to coarse grains was often fixed. The practices varied somewhat across provinces/cities. Food items sold through government grain shops primarily included cereals (chiefly rice and wheat flour), other coarse grains, and edible oil.

To the early 1990s, the system underwent few significant changes. A few minor changes include the following. (1) Per capita ration was reduced by one kilogram per month in late 1960 in response to the nation-wide famine. (2) There were three sale price increases in the mid 1960s. (3) In 1985, the sale price of grain supplied to those qualified agricultural population was increased to equal the procurement price (the non-agricultural population was still provided with grains at the unified sale price which was below its procurement price). In the same year, changes in the provision to other grain users were also made.

Starting from the early 1980s, the subsidy on grain consumption increased quickly and by 1990 it reached a total of 27 billion yuan (see Table 1) as a result of the significant increase in the procurement price but no increase in the grain sale price to the non-agricultural population. This soon drew much attention and debate in the country. Some advocated that the government should substantially reduce its control over the grain marketing business and that grain prices should be left to be determined by the market (see, for example, Liu, Zhou, Gao and Chen 1986; Cheng, Lu, and Yan 1987; Yu 1987). But others argued that China's grain cannot be totally left to the market because of the critical importance of grain in feeding

the people and maintaining social stability (Liu 1986; Ma 1987). The government left the sale price of grain untouched in order to maintain social stability.

3.2 The PDSs since the Early 1990s

It is seen from the above that, by the early 1990s, in both India and China a large amount of money had been spent on subsidising food consumption. The PDSs without targeting unnecessarily subsidise many who are not poor. Majority of the consumers in both countries nowadays can afford the purchase of their food at the market price. Thus, to reduce the heavy food subsidy, many have argued that the PDSs need to be reformed so to target at the poor only (Deng 1991; Jha 1992; Ahluwalia 1993; and Pal, Bahl and Mruthyunjaya 1993). Since the early 1990s, both governments have brought reforms to the PDSs but have chosen different paths. India has endeavoured to make the PDS increasingly targeted at the poor while China has tried to reduce the subsidy burden by removing the PDS.

3.2.1 India

Despite the heavy burden on the public exchequer, few have proposed to reduce or remove the operation of the PDS so as to reduce the burden of subsidy. Many agree that the PDS should be viewed as an instrument of income transfer in favour of the poor. Thus, while it is necessary to reduce the subsidy, the existence of the PDS is believed to be justified in order to provide food security to the poor (Ahluwalia 1993; Dantwala 1993; Pal, Bahl and Mruthyunjaya 1993). Such a view is shared by the government, which believes that (1) the elimination of the food subsidy is neither desirable nor feasible in the short and medium term although there is a strong reason to contain it, and (2) the PDS, as it has now evolved and grown, needs to pay more attention to the vulnerable poor (GOI 1994, p. 66).

Under such guidelines the government first in early 1992 launched a scheme to revamp the PDS in some 1800 backward and remote areas. Additional grains were allotted to the states at prices which were lower than the issue prices for normal PDS. Measures were then also undertaken across the states during 1992-95 to reduce entitlements to the non-poor or less poor population from the PDS in an effort to reducing subsidies. Different types of ration cards (with different rations) were introduced for different groups of population. In 1997, the government launched a revised scheme of distribution known as Targeted Public Distribution System (TPDS). Under TPDS, distribution of foodgrains operates under two tier system of delivery to households Below Poverty Line (BPL) and Above Poverty Line (APL), with each BPL family receiving 10 kilograms of foodgrains per month at heavily subsidised prices (see Table 2). Of the 17.5 million tonnes of total BPL and APL allocation per annum, some 41% (7.2 million tonnes) are earmarked for BPL population (GOI 1999, p. 69).

[Table 2 here.]

Subsidy on foodgrain consumption has been rising sharply since 1990 (see Table 1). It has been a regular practice in the past to adjust the PDS issue prices of rice and wheat in response to increase in the minimum support prices to producers. However, the issue prices were remained unchanged after February 1994 (see Table 2). Further, from June 1997, the issue prices were actually lowered for the BPL population, thus widening the gap between the costs of grains and the issue prices, resulting in substantial increase in the food subsidy. Raising of issue prices from January 1999 for APL population is expected to help reduce the subsidy.

By the late 1980s and early 1990s, grain consumption subsidy issues were receiving increasing attention (Du 1989; Gu 1990; Ke 1990; Huang 1990; Deng 1991). In May 1991, the government moved to reduce subsidies for rationed grain by increasing the unified grain sale price. After this increase, however, the sale price was still lower than the procurement price. In April 1992, the sale price was further increased to equal the grain procurement price.

Market grain prices were low as a result of good harvests since 1990. They became not much different from prices of grains from government shops. Consumers bought more grains from the market. This enabled the reform trials of the UGSS to speed up and to be applied on a wider scale, particularly during late 1992 and early 1993. By about mid 1993, the UGSS, which was in use for about four decades, disappeared in most areas of the country.

From October 1993, the grain price in the free market increased sharply with the situation aggravated by panic buying. Having been so sensitive about the grain price, the government immediately mobilised various resources to cope with this price surge, including placing a ceiling price on grain traded in the free market. Grain price was brought under control by about early December of that year with heavy administrative intervention.

In the first half of 1994, price fluctuations continued in some areas. From July 1994, grain prices again rose quickly all over the country. From late 1994, some local governments restored the rationing methods to supply grain to urban consumers at a subsidised rate.

During 1995, there were no worrying price surges, thanks to increased grain imports by the government and increased grain supply through government shops at subsidised prices. Some areas started to reintroduce coupons and by September some half of the provinces restored the use of coupons (Anon. 1995; Ka 1995).

Following the abolishment of the UGSS, local governments are assigned the primary responsibility of handling grain matters under their jurisdiction. Consequently, although they still procure grains under a quota regime at a government-set price, the methods of public distribution of grains are not identical across regions. Some cities sell subsidised grains through government shops without a ration; others do so with a ration. But few of them used any targeting, except in a few cities, e.g., Shanghai and Beijing, where attempts have been made to targeting the low-income population.

4. The Indian and Chinese Experiences Compared: The Need for a Formal PDS Arrangement

In both India and China, the public distribution of food was instituted as a result of food shortage. Both the food distribution systems have played an important role in ensuring that the people of each country have an adequate food intake, particularly during times of food shortage. Both supply their people with food at subsidised prices under a ration system but the coverage is different. In China, the ration system was in favour of the urban people and all the registered urban population, irrespective of wealth, was covered by the ration system (up to mid 1993). Only a small portion of the agricultural population is entitled to draw supplies from government food shops. In India, both the urban and rural population and the rich and poor are entitled to government subsidised food.

Both the public distribution systems do not have a direct targeting involved. However, the PDS in India, despite the fact that it covers the total population, does in fact target mainly the lower income people, though indirectly and implicitly, by providing fair-to-average quality grains which tends to turn the affluent away from the system. The Chinese way (prior to 1993), while deliberately discriminating against the rural population, has no targeting of the poor at all. People

of all income levels relied on government subsidised grain so long as they were entitled to it. Most Chinese were equally poor during the pre-reform period.

The lack of targeting has unnecessarily subsidised those who are not poor, contributing to the increasing food subsidy. After decades of economic development in both India and China, majority of the consumers have enjoyed an increased income and can afford the purchase of their food without a subsidy. Thus, excluding the non-poor from the coverage of the PDS is necessary. This helps to reduce the food subsidy burden and to allow the subsidy targeted at those who are really in need.

It has been seen that India is moving in that direction, though slow and gradual. With improved targeting, the Indian PDS is increasingly shifting to look after the interest of the poor. A recent survey of FPS customer profile confirms that the majority belonged to lower income working class and middle income group, which is "in tune with the broad thrust of PDS" (Koshy and Gandhi 1997).

In contrast, the Chinese government chose to reduce the subsidy by completely removing the UGSS in mid 1993. This removal, however, failed to consider the grain security of low income people and made no attempt to insulate their grain supply from possible fluctuating market prices. When market prices increase, as did in late 1993 and in parts of 1994, it is the poor's interest which is hurt most while the impact on those relatively wealthier can be marginal. Had the grain security of the poor been ensured, the government would not need to panic with every price fluctuation. In this sense, the 1993 complete abolition of the public distribution of grains was too hasty.

While years of economic reforms have improved the income of many Chinese, there are still many low-income people. The officially claimed rural poor now is 42 million but the actual number can be higher. There are at least 10 million rural mobile population staying in urban areas who do not have regular/stable income source. Added to this is the increasing urban poverty. There is an increasing number of unemployed people redundant from stateowned enterprises; many of whose income source can be in no way guaranteed. In addition, there is also increasing number of the retired, elderly and disabled people who cannot get their normal pension payment due to the loss-making or bankruptcy of their enterprises. The number of people falling into these categories is likely to be massive and increasing (He 1997, pp. 220, 226). Indeed, there have been numerous reports recently addressing the increasing urban poverty issue and stressing the need for social support for this group of people (Wang 1994; Lu 1994; Hong 1996; Gao 1997; He 1997, pp. 219-240, Wang 1999). If the minimum poverty line of US\$1 per person per day suggested by the UN is used, the number of the Chinese population below the poverty line would be much higher. In fact, according to the statistics by China's Ministry of Civil Administration, in recent years, there are about 230 million people who are in need of relief (He 1997, p. 223).

Some may argue that, in China's urban areas, few are starving and few have not been able to buy their food. However, the true picture is that those in low income have been helped by some kinds of informal community support mechanism, i.e., through help from family members, friends or relatives. Thus their problems often do not surface and go unreported. One of the authors has, during his visits to China in the past years, interviewed people of various backgrounds on numerous occasions about such informal arrangements and has confirmed that these kinds of community supports have been common. Such community support is important and useful, especially in the short term. However, such support may not be expected to sustain for too long. A Chinese proverb says, "Being poor for too long will have no close neighbours". Some sorts of formal public arrangements are necessary.

According to the food security framework proposed by Oshaug et al. in the earlier section, three broad categories of policies, strategies or means are available to ensure people's stable

access to food supply. These are social security programs and economic policies affecting income distribution and markets, in addition to community support. Given that in both India and China, social security programs are less developed and less comprehensive, especially in the areas of unemployment benefits and family allowances payments (US Social Security Administration 1997), the use of economic policies to affect income distribution and markets is a practical strategy to help the poor to have a stable access to food. A PDS can be used as a useful instrument of income transfer in favour of the poor and can be used to affect the market behavior. Hence, the Government of India has repeatedly reinforced that "The Public Distribution System continues to be a major instrument of Government's economic policy to enhancing food security to the poor" (GOI 1999, pp. 67-69).

Therefore, the comparison of the Indian and Chinese experiences, especially with respect to India's firm commitment to the operation of its PDS and China's reverting back to PDS arrangements soon after its removal, suggests that in both India and China, a government-run PDS is necessary to look after the food security of the poor. This is due to the presence of the large number of poor population and the lack of properly developed social security programs. In China, efforts should be made to reduce the grain subsidies by proper targeting at the poor. In India, further efforts are needed to reduce or eliminate the coverage of the non-poor under the PDS.

5. Efficiency Concerns Addressed

The presence of a large sum of food subsidy in both countries has often been the target for criticisms and the efficiency of the PDSs has often been questioned. It is certainly important to improve the efficiency of the PDSs and thus to reduce the food subsidy. However, one may be reminded that efficiency is only one of the major objectives of government economic policy and other aspects of policy objectives should not be neglected. According to McTaggart, Findlay and Parkin (1996, pp. 13-14), the four major objectives of policy are efficiency, justice (or fairness, or equality), growth, and stability. Unfortunately, it seems quite often that many tend to focus so much on efficiency but give so little attention to justice.

Nonetheless, justice is very important for the long-term development of a society. Surely, in many cases, the achievement of justice or equality may have to be done at the expense of economic efficiency to some extent. However, if equality is not properly looked after, social unrest may develop which can cause slowdown in the increase in economic efficiency and growth. Any government policy attempting to achieve long-term economic efficiency and growth should have had the justice and equality matters taken into consideration.

In developed countries, equality matters are looked after through their long and well developed social security programs. The implementation of such programs, where direct transfer payment often is involved, requires the existence of an effective income monitoring mechanism so that income test can be applied. Most developing countries do not have such a mechanism. Alternate arrangements must be present to take care of the less fortunate sector of the population. A government-administered system for distribution of food at reasonable prices remains a major option and is adopted by many developing countries as an instrument of income transfer in favour of the poor. Such an option is perhaps most feasible and cost-saving for conditions peculiar to developing countries where income test is too difficult to be applied. In this light, the expenditures in developing countries on food subsidy are of the same nature as expenditures on social security programs in developed countries.

It is admitted that there exists leakage of benefits from such public food distribution systems and the efficiency of their operations is not as high as one would desire. These problems, however, are not inherent to such PDSs in developing countries. Such problems are

also common to social security programs in developed countries. For example, food stamps in the USA may be used to exchange for cigarettes; a person may get cash payment for employment while claiming unemployment benefits in Australia. The point is if such programs are indeed necessary at all to help the less fortunate people, then what is needed is the wisdom to overcome the problems and help to improve their efficiency of operation but not to simply get rid of them in the name of efficiency.

A comparison of the proportion of social security expenditure to the total government expenditure in USA, Australia, Japan and that of food subsidy expenditure to the total government expenditure in China and India reveals that the social security expenditure in developed countries is relatively much higher than the expenditure on food subsidy in India and China (Figure 2). Whereas social security expenditure is of the order of 22% in the US, 35% in Australia, and 22% in Japan, food security/subsidy expenditure in recent years is only about 4% in China and 3% in India relative to the total government expenditure. For China, even when all other expenditure of social security nature is included, the proportion is still much smaller (<10%) than that in the developed countries. In India, government expenditure on social security and welfare (not including food subsidy) amounts to 3.2% of total government expenditure (Ministry of Finance 1997). Adding food subsidy to this still makes it only about 6 percent of the total government expenditure. Figure 2 also reveals that food subsidy remains a major means of providing social security in China.

[Figure 2 here.]

So, when researchers, both from within developing countries and from developed countries, come to evaluate food subsidy and PDS efficiency issues of developing countries and offer their policy prescriptions, they ought to take the following into consideration:

- (1) the relatively large size of the poor population in developing countries such as in India and China;
- (2) the role of the PDS in ensuring food security for the poor; and
- (3) the relatively small expenditure in developing countries on food subsidy/social security programs.

It may be also pointed out that those economists or policy makers or whoever in a position to discuss or evaluate food subsidy and PDS efficiency issues are not one of the poor and may have hardly had much experience of worrying one's access to food. It is in this sense that they need to exercise extreme precaution when they come to tell a government what to do about their programs that are designed to ensure the poor's food security. It is thus appropriate to close this section by quoting the following from Spitz (1985):

If there were only one justification for defining right-to-food policies it would follow from the recent policies of the International Monetary Fund. IMF policies were intended to bring pressure to bear on governments of African, Asian and Latin American countries to reduce food subsidies, in the name of economic realism. This invocation of market laws against the right to food of the poor caused food riots in Cairo and Tunis, in the cities of North-east Brazil, and in the Dominican Republic. Those who have died in these riots have been deprived of their right to live in the name of 'economic realism', taught in quiet university classrooms to students who can get the highest degrees and honours in economics without having ever heard of words such as human dignity or exploitation. ... I would suggest that future decision makers be exposed during their university years to the history of peoples' struggles for the recognition of their right to food so that when they take decisions, they do so 'en route coiznaissance de cause', as clearly as a soldier knows the result of pulling a trigger. Denying the right to food in the name of economic realism is naive ignorance on the part of some, or cynical realpolitik on the part of others.

6. Summary and Concluding Remarks

In this paper we compared the public food distribution systems practised in India and China in an attempt to assess whether a public food distribution system is necessary to ensure the food security of the poor in developing countries.

Both India and China supply their people with food at subsidised prices through a public food distribution system but the coverage is different. In China, the system was in favour of the urban people while in India everyone is entitled to government subsidised food. The lack of targeting in their PDSs, however, unnecessarily subsidises those who are not poor, contributing to the increasing food subsidy. India has moved, though slow and gradual, to shift more attention to look after the interest of the poor and to make the PDS serve as a major instrument of government's economic policy to enhancing food security to the poor. China, on the other hand, at one stage chose to reduce the food subsidy by completely removing its PDS but soon reverses had to be made due to undue price increases in the market.

The Indian and Chinese experiences suggest that a government-run food distribution system should reduce or eliminate its coverage of the non-poor but get more targeted at the poor population. Such a system is necessary to look after the food security of the poor in developing countries, especially where there is a presence of a large number of poor population and where the social security program is less developed and less comprehensive. This kind of distribution system may be gradually phased out, if so desired, only after other forms of social security programs are established in a country.

A subsidy is commonly associated with the operation of a PDS. However, to ensure the poor's access to food, such a subsidy is often unavoidable and goes predominantly to the poor, though through different ways. In developed countries, the poor's access to food is protected through various social security programs. Food subsidy programs, on the other hand, are found in many developing countries as documented in Pinstrup-Andersen (1988a). Pinstrup-Andersen (1988a) clearly indicates that a food subsidy is necessary to ensure the vulnerable sections of society have an adequate food intake.

One perhaps should not always think, from a short-sighted financial perspective, that food subsidy is a burden to the society. In fact, some have argued that if food subsidy programs are adequately designed, food subsidies may contribute to, through better human capital, economic growth (see, for example, Pinstrup-Andersen 1988b, pp. 12-13).

Otherwise, if the right to even basic food needs of vulnerable sections of society are left neglected and unprotected, there will be little chances of their coming out of poverty and hunger. Persistent hunger of the poor, while unacceptable, will cause social and political unrest and eventually slow down the development of the nation. Where the number of poor is large, such as in India where population growth still has not been brought under control, their hunger problem would be a problem not only of the nation but also of the whole international community. This is clearly addressed in the Rome Declaration: "We express our deep concern over the persistence of hunger which, on such a scale, constitutes a threat both to national societies and, through a variety of ways, to the stability of the international community itself" (FAO 1996).

We hope our study will make a small contribution to drawing people's increased attention to fighting the hunger problem through developing appropriate programs that ensure the poor's stable access to an adequate amount of food throughout the world.

Table 1. Government Subsidy on Food Consumption in India and China

Year	India	China	
	(million rupees)	(million yuan)	
1977	4773		
1978	4801	1114	
1979	5694	5485	
1980	6000	10280	
1981	6500	14222	
1982	7000	15619	
1983	7110	18213	
1984	8350	20167	
1985	11010	19866	
1986	16500	16937	
1987	20000	19543	
1988	20000	20403	
1989	22000	26252	
1990	24760	26761	
1991	24500	26703	
1992	28500	22435	
1993	28000	22475	
1994	55370	20203	
1995	51000	22891	
1996	53770	31139	
1997	60660	41367	
1998	75000	56504	

Notes: India, financial year, April-March, subsidies on foodgrains including sugar for some years. China, calendar year, subsidies on grain, cotton and edible oil. Data without cotton not available.

Source: Fertiliser Association of India 1997, Fertiliser Statistics, 1996-97, page II-30. Government of India, Economic Survey, various issues.

State Statistical Bureau 1999, China Statistical Yearbook 1999, p. 283.

Table 2. Costs and Issue Prices of Wheat and Rice (Rs/Quintal)

Year	Wheat		Rice	
	Cost	Issue Price	Cost	Issue Price
1991-92	391	280	497	377
1992-93	504	280	585	377
1993-94	532	330	665	437
1994-95	551	402	695	537
1995-96	584	402	763	537
1996-97	640	402	848	537
1997-98	801		940	
BPL		250		350
APL		450		700
1998-99	808		1076	
BPL		250		350
APL		650		905

Source: Government of India 1999, Economic Survey, p. 72.

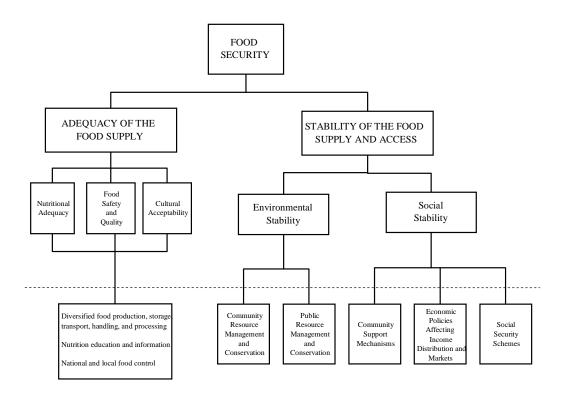
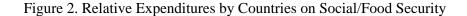
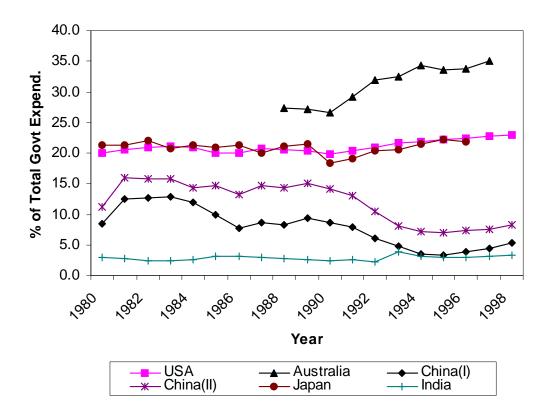


Figure 1. A Normative Basis for Food Security

Note: Above dotted line = guiding principles; below dotted line = examples of policies, strategies and means.

Source: Oshaug et al. 1994.





Notes: (1) Central/federal outlays on social security programs or food subsidy out of total government outlays.

- (2) China(I) include subsidies on grain, cotton and edible oil. Data without cotton not available.
- (3) China(II) include China(I) plus other expenditures of social security nature.

Sources: Australian Bureau of Statistics, Year Book Australia, various issues.

Fertiliser Association of India 1997, Fertiliser Statistics, 1996-97, page II-30.

Government of India, Economic Survey, various issues.

Government of Japan,, Japan Statistical Yearbook, various issues.

State Statistical Bureau 1999, China Statistical Yearbook 1999, pp. 265, 270, 283.

U.S. Bureau of the Census, Statistical Abstract of the United States, various issues.

References

- Ahluwalia, D. 1993, 'Public distribution of food in India: coverage, targeting and leakages', *Food Policy*, 18:33-54.
- Anon. 1995, 'What does the reintroduction of coupons mean?', *Beijing Economic News*, 17 September
- Australian Bureau of Statistics, *Year Book Australia*, various issues, Government Printing Services, Canberra.
- Cheng, S.H., Lu, P. and Yan, X.G. 1987, 'Development of market economy requires the decontrol of grain prices', *Problems of Agricultural Economics*, June, pp. 34-35.
- China National Conditions and Power, monthly, various issues.
- Dantwala, M.L. 1993, 'Agricultural policy: prices and Public Distribution System: a review', *Indian Journal of Agricultural Economics*, 48:173-186.
- Deng, Y.M. 1991, 'A proposal on the reform of the grain rationing system and an analysis of the extent of possible support from urban dwellers', *Chinese Rural Economy*, April, pp. 10-15
- Dev, S.M. and Suryanarayana, M.H. 1991, 'Is PDS urban biased and pro-rich?', *Economic and Political Weekly*, 12 October, 26: 2357-2366.
- Du, X.N. 1990, 'Grain marketing should not take a road of total decontrol', *Chinese Grain Economy*, No. 1, pp. 23-24.
- Eide, W.B., Holmboe-Ottesen, G., Oshaug, A., Perera, D., Tilakaratne, S. and Wandel, M. 1985, *Introducing National Objectives into Rural Development Programmes with Focus on Agriculture. Report No. I: A Theoretical Contribution*, Institute for Nutrition Research, University of Oslo.
- Eide, W.B., Holmboe-Ottesen, G., Oshaug, A., Perera, D., Tilakaratne, S. and Wandel, M. 1986, *Introducing National Objectives into Rural Development Programmes with Focus on Agriculture. Report No. 2: Towards Practice*, Institute for Nutrition Research, University of Oslo.
- FAO 1996, 'Rome Declaration on World Food Security', Rome, Italy.
- Fertiliser Association of India 1997, *Fertiliser Statistics*, 1996-97, Fertiliser Association of India, New Delhi, page II-30.
- Gandhi, Vasant P. and Abraham Koshy, 'Can targeting work in food security programmes? A study of consumer behaviour and the fair price shop system for food in India', paper presented at the XXIII Conference of the International Association of Agricultural Economists in Sacramento, California, August 10-16.
- Gao, G. 1997, 'China after Deng: interviews with high-level decision makers', *China News Digest*, No. 325, pp. 3-6.
- George, P.S., (1996), 'Public distribution system, food subsidy and production incentives', *Economic and Political Weekly*, September 28.
- Government of India, Economic Survey, various issues, Government of India, New Delhi.
- Government of Japan, *Japan Statistical Yearbook*, various issues, Government of Japan, Tokyo.
- Gu, Q.F. 1990, 'Grain price subsidy in China and government intervention in grain marketing, 1977-1986', *Grain Economy Research*, No. 1, pp. 21-24.
- He, Q.L. 1997, *Traps of Modernisation: Current Economic and Social Problems in China*, China Today Press, Beijing.
- Hong, Y. 1996, 'Urban poverty: it should not be neglected and requires measures to handle', *China National Conditions and Power*, January, pp. 27-28.

- Huang, Y.X. 1990, 'The grain rationing system has to be reformed urgently', *Chinese Grain Economy*, No. 6, pp. 22-23.
- Jha, S. 1992, 'Consumer subsidies in India: is targeting effective?', *Development and Change* 23: 101-28.
- Ka, L. 1995, 'How to comprehend the reintroduction of coupons', *Economic Daily*, 22 February, p. 2.
- Ke, B.S. 1990, 'Grain price systems in state grain marketing sector and the subsidy problem', *Chinese Rural Economy*, November, pp. 44-50.
- Koshy, A and Gandhi, V. 1997, 'Developing a new organisational strategy in the context of the new market and policy environment', report to Gujarat State Civil Supplies Corporation, Indian Institute of Management, Ahmedabad, India.
- Liu, S.J. 1986, 'The formation of the grain price and recommendations for its reform', *Chinese Rural Economy*, November, pp. 6-11.
- Liu, Y.Z., Zhou, B.B., Gao, H.B. and Chen, J. 1986, 'Non-commercialisation, semi-commercialisation and commercialisation: the crux of and solution to China's grain problem', *Problems of Agricultural Economics*, June, pp. 18-22.
- Lu, J.H. 1994, 'Unemployment: a social problem which should not be neglected', *China National Conditions and Power*, August, pp. 7-9.
- Ma, L.Y. 1987, 'Low grain prices and ideas to reform it', *Chinese Rural Economy*, November, pp. 4-7.
- McTaggart, D., Findlay, C. and Parkin, M. 1996, *Economics*, 2nd edn, Addison-Wesley, Sydney.
- Ministry of Finance (1997), *Indian Public Finance Statistics*, 1996, Government of India, New Delhi.
- Oshaug, A. 1992, 'Towards Nutrition Security', Country Paper for Norway, International Conference on *Nutrition. Nordic School* of *Nutrition/Institute for Nutrition Research*, University of Oslo.
- Oshaug, A., Eide, W.B., and Eide, A. 1994, 'Human rights: a normative basis for food and nutrition-relevant policies', Food Policy, Vol. 19, pp. 491-516.
- Pal, S., Bahl, D.K. and Mruthyunjaya 1993, 'Government interventions in foodgrain markets: the case of India', *Food Policy* 18: 414-27.
- Parikh, Kirit S., (1994), 'Who gets how much from PDS How effectively does it reach the poor?', *Sarvekshana*, January-March.
- Pinstrup-Andersen, P. (ed.) 1988a, Food Subsidies in Developing Countries: Costs, Benefits, and Policy Options, The Johns Hopkins University Press, Baltimore.
- Pinstrup-Andersen, P. 1988b, 'The social and economic effects of consumer-oriented food subsidies: A summary of current evidence'. In P. Pinstrup-Andersen (ed.) 1988, *Food Subsidies in Developing Countries: Costs, Benefits, and Policy Options*, The Johns Hopkins University Press, Baltimore, pp. 3-18.
- Radhakrishna, R. 1996, 'Food trends, Public Distribution System and food security concerns', Indian Journal of Agricultural Economics, Vol. 51, pp. 168-183.
- Spitz, P. 1985, 'The right to food in historical perspective', *Food Policy*, Vol. 10, pp. 306-316.
- State Statistical Bureau 1999, *China Statistical Yearbook 1999*, Chinese Statistical Press, Beijing.
- Suryanarayana, G. 1985, Public Distribution in India, Chugh Publications, Allahabad, India.
- U.S. Bureau of the Census, *Statistical Abstract of the United States*, various issues, Washington, D.C.

- U.S. Social Security Administration 1997, *Social Security Programs Throughout the World* 1997, Research Report #65, Social Security Administration, Washington, D.C.
- Wang, H.J. 1999, 'China in the world economy: Economic development prospects and some social issues', keynote paper presented at the 11th Annual Conference of the Association of Chinese Economic Studies (Australia), the University of Melbourne, Australia, 15-16 July 1999.
- Wang, X. 1994, 'China strives to eradicate poverty', Beijing Review, May 16-22, pp. 7-12.
- Yu, Z.L. 1987, 'A preliminary discussion on the commercialisation of grain', *Problems of Agricultural Economics*, June, pp. 25-28.
- Zhou, Z.Y. and Chen, L.B. 1997, 'China's grain distribution system and its reforms', Paper presented at the XXIII Conference of the International Association of Agricultural Economists in Sacramento, California, August 10-16.
- Zhu, L. 1997, 'Income distribution and food security in rural China', Paper presented at the XXIII Conference of the International Association of Agricultural Economists in Sacramento, California, August 10-16.