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India's Public Distribution System

A National and International Perspective

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with S. Indrakant and C. Ravi

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FOREWORD

Reducing poverty in India is one of the major development challenges faced in the world. The Government of India has experimented with a number of direct anti-poverty programs. Of these, the Public Distribution System (PDS)—a quantity rationing-cum-food subsidy program—is perhaps the oldest. It has evolved in its present form in the wake of national-level food shortages of the 1960s. Since then, the national agricultural scene has vastly changed for the better, contributing to a substantial fall in the incidence of poverty. However, the PDS remained fundamentally unaltered, and the cost of food subsidy has grown enormously since the mid-1980s. Moreover, some stake governments have introduced food subsidy programs with additional resources of their own.

Since 1990, India has introduced a wide range of economic reforms, including significant liberalization. Within these reforms, the PDS has been given added emphasis. Some changes towards better regional targeting are being considered. However, few studies have estimated the impact on poor households of PDS, in terms of reductions in the incidence and severity of poverty as well as nutritional improvements. Nor have the costs per unit of welfare gains been estimated. This study—a joint product of the PREM Poverty Anchor Group and the South Asia Department—fills this gap.

In view of the important role played by safety net programs, both during normal times and in periods of major economic reform, it is hoped that this case study for India would be of interest to researchers and policy-makers engaged in poverty reduction.

Michael Walton
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ABSTRACT

We estimate the impact on poor households of India's Public Distribution System (PDS) in terms of income gains, reductions in the incidence and severity of poverty as well as nutritional improvements. We assess the cost-effectiveness of PDS, relative to other programs. We then evaluate the rice subsidy program in the state of Andhra Pradesh. Our findings suggest that the welfare gains of PDS in terms of income transfer were very meager and the impact on poverty and nutritional status minimal. Even the meager transfer benefits were realized at an exorbitant cost. In the light of international experience and India's own experience, we review the options for reform and, in this context, assess the recent moves of the Government of India towards a better targeted PDS.

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EXECUTIVE SUMMARY

Quantity rationing of essential commodities has been in existence in India since the inter-war period. The Public Distribution System (PDS) in its present form—a (producer) price-support-cum-consumer subsidy program—has evolved in the wake of critical, national-level food shortages of the 1960s. The program has probably contributed to a containment of upward pressures on food prices and ensured access of the food to urban consumers—the two principal objectives of the scheme at that point in its evolution. Although the national agricultural scene has vastly changed for the better, contributing to a fall in the incidence of poverty (from about 50 percent in the 1950s to 30 percent in the 1990s), the design of PDS has remained fundamentally unaltered, except that its outreach is now being extended to rural areas and tribal blocks and areas of high incidence of poverty. The food subsidy cost has trebled over the past two decades, and accounted for 0.7 percent of GDP in 1993-94. PDS is now "perceived" to be the main safety net to protect the poor from potential short-run, price-induced adverse effects of the economic reforms currently under way, but the perception appears to be far from reality.

Notwithstanding the added emphasis given to PDS in the wake of economic reforms, few studies have estimated the welfare gains—in terms of income as well as nutritional impacts. Nor have the cost per unit of income or nutritional gains been estimated. This paper fills this gap. It estimates the gains and costs of PDS, and compares it with other similar programs. The impact of PDS on the incidence and severity of poverty is also estimated. Based on the country's own experience and the experience of other countries, the paper considers various policy options for reform.

Main Findings

Though it has been in operation for four decades, the access of the poor to PDS is still very limited. The access is particularly weak—almost nil—in the states with the highest incidence and severity of poverty. The access of the poor is much better in a few states, particularly Andhra Pradesh and Kerala. Yet, even in these states, the monthly cereal purchases tended to be regressive.

The per capita income gain to the poor in 1986-87 from all (food and nonfood) consumer subsidies was no more than Rs 2.01 per month, or 2.7 percent of their per capita expenditure, in rural areas; in urban areas it was slightly higher at Rs 3.4 per month (or 3.2 percent of per capita expenditure). There were differences in the magnitude of income transfers between commodities and across the states, but the overall transfer gains were very meager indeed. Only in four states (Andhra Pradesh, Karnataka, Kerala and Gujarat), the income gains to the poor were substantially higher than the national average, but some of these states have expended additional resources of their own on the program.

Not surprisingly, the impact of PDS on poverty and nutritional status was minimal. For the country as a whole, without PDS poverty would have increased by 2 percentage points; the adverse impact would have been extremely small at 0.3 percentage points in rural areas of the states with the highest incidence of poverty. With the exception of Andhra Pradesh and Kerala, the nutritional impact of PDS has been minimal.

Even the meager transfer benefits were realized at an exorbitant cost. When only the Central government costs are considered, an amount of Rs 4.27 was incurred to transfer one rupee of income to the poor. Typically, in addition to Central expenditures, state governments also incur costs of their own. When the combined state and Central level costs were estimated, one rupee of income was transferred at a cost of Rs 6.35 in Andhra Pradesh; the costs could be even higher in administratively weaker states which also account for a large share of the poor. Given this high level of costs, the program is unlikely to become cost-effective, unless drastic changes are introduced in its design.

In comparison with other anti-poverty programs, PDS turns out to be the costliest. PDS delivered 100 kcal of nutrients at three times the cost incurred under the direct nutrition program of Integrated Child Development Services (ICDS). In terms of cost per rupee of income transferred, both the national PDS and the AP rice subsidy scheme are much less cost efficient than employment and nutrition programs. The main reason: while the two food transfer programs adopt income-based means tests, self selection occurs to a great extent in nutrition programs and to a lesser extent in employment programs.

PDS and Changing Agricultural Scenario

PDS in its present form had evolved in the 1960s when the agricultural scene in the country was completely different from today. The Indian agricultural situation has vastly changed for the better. Not only has foodgrains growth rate exceeded the effective demand for foodgrains, but more importantly, the regional location of accelerated growth—the eastern states—has been highly conducive for poverty reduction. There has been a substantial reduction in the incidence and severity of poverty. An untargeted, open-ended price-cum-consumer subsidy program hardly fits in with the realities of these recent developments.

Relentless pursuit of a program basically at odds with economic realities and the changing profile of poverty has its inevitable costs. In order to pass the effect of the devaluation and economy-wide reforms, procurement prices and issue prices have had to increase. Without accompanying reforms in external trade and better targeting of PDS, the welfare implications of higher procurement and issue prices are likely to be adverse. For example, in response to highly favorable procurement prices (in relation to market prices), farmers unloaded huge stocks on to the Food Corporation of India (FCI). Large stocks, much in excess of those needed for strategic purposes, were accumulated. The carrying cost of buffer stocks now accounts for nearly one-third of the total food subsidy cost. At the same time, the poor did not benefit from the whole operation. PDS allotments have not been lifted in the states with the highest concentration of poverty because the (enhanced) issue price was close to the market price thereby rendering PDS virtually dysfunctional. In other states such as Andhra Pradesh, stocks were lifted, but only when a further subsidy was borne by the state governments, diverting resources from other priority sectors.

Lessons from International Experience

The cross-country experience reviewed in the paper suggests that practically every country that adopted open-ended programs has found the policy not only fiscally unsustainable but also, more importantly, significantly distortionary in its effects on the agricultural sector. Most countries have begun to restructure their systems of food transfer.

While no particular targeting method was found to be perfect, even imperfectly targeted programs have proven better in reaching the poor and keeping the costs down than completely open-ended programs. Restricting the subsidy to commodities disproportionately consumed by the poor led to considerable self-targeting of the program in some countries; the costs were contained and the benefits reached poor consumers. In general, income-based means tests have proven difficult to administer. Leakages appear to be lowest in programs that selected beneficiaries contingent upon the beneficiary's (or their children's) participation in another activity, such as a child's attendance in a primary school, or registration at primary health clinics. Tying beneficiary participation (or time contribution) to food transfers lowers not only leakages but may also lower the economic costs associated with work disincentives. However, care needs to be taken that the poor's participation does not lead to excessive transaction costs to them.

Elements of a Reformed PDS

Any proposals for a revamped and restructured food transfer program for India needs to be made against the backdrop of the changing agricultural and institutional scenario in India. In particular, three aspects of change are stressed in the paper. First, the overall national-level shortages have abated; the country's cereal production is growing faster than the effective demand. The relatively poor eastern regions—West Bengal in particular—have seen a significant improvement in grain production. The incidence of poverty has steadily fallen since the 1950s. Second, except in tribal and a few dry land areas, the agricultural marketing infrastructure is well-developed and integrated. Third, following democratic decentralization, the Panchayat Raj Institutions (PRI) can now be entrusted with the responsibility of implementing all major poverty alleviation programs.

The Government of India has recently made drastic changes in the Public Distribution System. The new Targeted Public Distribution System (TPDS) would most definitely correct the regional misallocation of FCI grain supplies, to the extent the incidence of poverty will be given a substantial weight in grain allocations between the states. However, TPDS expects the retail dealers at PDS outlets to supply the <u>same</u> variety of grain at <u>half</u> the price to the poor, and at the regular price to the nonpoor. The poor will be identified and given ration cards. The scope for abuse and diversion of supplies from the poor to the nonpoor in this system is likely to be high, given past experience with similar arrangements for kerosene and cooking oil. The GOI wants to enforce strict monitoring, but this is likely to be administratively costly. Except for better regional allocation of supplies, new TPDS virtually retains all other earlier characteristics of the system, albeit with increased scope for abuse at the retail outlet level. It is unlikely that the costs of operation of FCI will fall under the new TPDS.

Given the changes in India's agricultural economy, and bearing in mind the weaknesses and constraints under which the FCI currently operates, the study recommends a reduced role for FCI, by phasing out government controls over grain markets as well as procurement operations. FCI could be allowed to compete in the market, free from controls, but with the added advantage of scale economies. FCI may, over time, become an effective player in the market. Its new role may be to stabilize the price of foodgrains within a band, and to maintain strategic buffer stocks or equivalent foreign exchange reserves; it could intervene in the market by off-loading stocks.

The study recommends that the subsidy cost saved (as FCI goes out of procurement operations) could be distributed to PRIs in the form of food stamps or vouchers or as a conditional cash grant. The poor—identified by PRIs—may be given these vouchers, to be exchanged for food either at PDS outlets or at regular private grain stores. To begin with, vouchers could be given to participants of JRY (and other employment programs) since the poor may be expected to self-select themselves into such programs. Careful planning would be needed before extending vouchers to other categories.

Where such a voucher program is difficult to administer, PDS retail outlets may still supply grain, but introduce PRI-administered identification of the poor. One sub-option is to link the food voucher program with other programs depending upon availability—such as employment programs (JRY/EAS), or nutrition programs (ICDS). These measures are most likely to ensure targeting without incurring additional costs. At the same time, the poor may be given some choice in the type of grains as well as retail outlets. The existing PDS shops could still continue to function, but only as normal grain retail outlets (like any other private dealer) rather than as outlets supplying "subsidized" commodities as in the past.

The above structural changes would ensure that the income transfer would go to the intended beneficiary without incurring a huge cost on administration as is the case at present. It would also minimize incentive costs to the extent it strengthens work-fare or nutrition programs that confer benefits to the poor in high measure such as JRY and ICDS, as well as democratic institutions such as the Panchayat Raj.

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CHAPTER 1

INTRODUCTION

The Background

Of all the safety nets that are currently in operation in India, the most far reaching in terms of coverage as well as public expenditure (on subsidy) is the public distribution system (PDS). PDS has been in operation in some form or another since the inter-war period; thus it is probably the earliest publicly-funded safety net in the country. It aims to provide essential commodities such as rice, wheat, sugar, edible oil, soft cake and kerosene oil at subsidized prices. State governments, which manage the public distribution in their respective states, also supply other commodities like pulses, salt, coarse clothing etc.

In the early years, PDS was conceived of mainly as an instrument of price stabilization as well as an alternative to private trade. It was widely believed that private traders indulged in speculative activities and a countervailing agency was, therefore, needed to control traders' speculative activities. Its coverage was confined to urban areas and to a few food deficit states. In the 1950s and 1960s, the country was experiencing serious, national-level food shortages; the upward pressure on food prices was particularly acute in urban areas. The PDS as it evolved during this period probably served the dual purpose of containing the upward pressure on prices of staple food, and protecting urban consumers, even if it did not serve the interests of rural poor. Also, during this period, employment programs were limited in scope so that during a drought period, PDS supplies were augmented basically to keep the market price of staple within reasonable bounds. By the 1980s, the whole agricultural scenario has changed (for the better). The country experienced a green revolution, and per capita food availability has significantly increased. Nevertheless, rural poor households (especially the landless poor) benefited little from the program.

Not surprisingly, since the mid-1980s, the welfare component of PDS has gained importance and its coverage has been extended to rural areas in some states. Specially subsidized foodgrain distribution was introduced in 1985 in all the tribal blocks covering about 57 million people. PDS was later expanded under the Revamped PDS (RPDS) scheme to 1,752 blocks with a high incidence of poverty, covering 164 million people. Efforts were also made to increase the number of fair price shops (FPS) in rural areas. Subsidized foodgrains are also being distributed as a part of wages under the employment programs.

The food subsidy given by the Central Government increased from Rs 6.5 billion (0.5 percent of GDP) in 1980-81 to Rs 55 billion (0.7 percent of GDP) in 1993-94. Some states like Andhra Pradesh, Karnataka and Kerala have their own subsidized food schemes for which they provide additional subsidies.

PDS is now perceived to be the main safety net to protect the poor from short-run, price-induced, adverse effects of economic reforms (see Mooij, 1994). Hence there has been an added emphasis given to PDS as a safety net since the introduction of reforms—the RPDS being one such initiative. The question of topical interest is: to what extent is PDS serving the objective expected of it? And at what cost?

Most previous studies on the PDS in India have concentrated on the issues bearing on regional variations in the supply of foodgrains through PDS (Tyagi, 1990), urban bias in PDS (Howes and Jha, 1990), targeting of PDS (Jha, 1991; Dev and Suryanarayana, 1992), the growing cost of food subsidy, etc. Few studies have measured the welfare gains from PDS (Parikh, 1994). The welfare gains include the extent of income transfer to the poor through PDS and the consequential reduction in poverty and the extent of nutritional support to the poor. Virtually no studies exist comparing the welfare gains and costs of PDS with other anti-poverty, nutrition-based programs such as ICDS and income-support programs such as JRY which currently co-exist with PDS in India. This study aims to fill this gap.

It is also useful to get a global picture of the poverty-reducing effects of PDS, taking into consideration the initiatives of the Center as well as the States. Given the inefficiencies of the Food Corporation of India (FCI), a number of alternatives including food stamps schemes have been suggested for regulating the entire network of procurement, storage and distribution. A review of international experience would be helpful in examining policy options.

Objectives and Outline of the Study

This study addresses the following questions. What is the extent of income transfer through PDS? How much reduction in the incidence and severity of poverty has taken place as a result? What has been the nutritional impact of PDS on the poor? What did it cost to realize the above-mentioned gains, and how do PDS costs and benefits compare with other similar anti-poverty, nutrition-based programs? What can be learned from international experience in food transfers? In the light of India's experience and international experience, what options exist for reforming India's PDS?

In the second chapter, PDS is placed in the context of other anti-poverty programs (IRDP, JRY, ICDS, etc.). In addition, a brief review of the findings from previous research on PDS is provided.

In a federal set up, the cost of PDS is borne by both the Central and State governments. The cost borne by the Central Government for selected years is analyzed in Chapter 3. A number of important developments with regard to PDS have taken place in the recent period. Notably, the gap between the subsidized and open market prices has been closing, while some efforts have been undertaken to improve the targeting of the PDS (e.g., geographical targeting through the Revamped PDS). This chapter reviews these recent developments and their likely impact on the poor.

In Chapter 4, the extent of income transfer is measured. The impact of PDS on poverty is measured both in terms of incidence and severity. This was done for both rural and urban areas of India and for all the major states of India utilizing the NSSO data on PDS for the year 1986-87. The chapter also derives indirectly the possible nutritional impact of PDS. The chapter provides estimates of the cost of income transfer and consequential nutritional gains and compares the results with another similar program (ICDS) for Andhra Pradesh.

Chapter 5 provides an overview of the international experience with respect to food transfers with particular reference to lessons from various approaches to targeting and design of programs. Finally, in the last chapter (6), the options available for improving the effectiveness of PDS are discussed.