

**Combining Compensatory and Redistributive Benefits:  
The Challenge of Social Policies in Brazil**

**by Lena Lavinás\***

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## **Abstract**

The purpose of this article is to analyse several compensatory food security programmes implemented in Brazil and to discuss their design and results. The programmes analysed are the federal programme entitled PRODEA and a highly capillary state programme called *Cesta do Povo* (“People’s Foodbasket”). The underlying conclusion is that current programme designs are ineffective and inefficient and that a direct income transfer to the poor would have a greater redistributive impact, in addition to fostering higher levels of economic efficiency.

## 1. Introduction

Social policies involve income transfers, whether in monetary form or through the provision of services, and are independent of individual or socio-occupational group bargaining power. One can thus see the welfare state as a specific system of tax-based social transfers whose objective is to promote individual welfare through redistribution of income and wealth (assets), with a commitment to the idea of justice.<sup>1</sup> According to Van Parijs (1991, ch. 10), the issue of justice emerges because resources<sup>2</sup> are scarce<sup>3</sup> and principles of altruism and homogeneity do not prevail in our societies to orient people's behaviour.

Again according to Van Parijs (1995), there are three welfare models in Western history: the first, of Bismarckian inspiration, is based on an obligatory social security system, functioning *ex-post* in favour of those who have paid into a fund as workers over the course of their working life and who can draw on this fund if circumstances should make it necessary. It is a model in which personal interest prevails, with the goal of reducing risk and from which the notions of solidarity and equity are absent. A second, Beveridge-type model is based on the idea of *ex-ante* transfers (for example for health, education, etc.) and thus hinges on a stronger notion of solidarity than the previous model. In this case, the collective interest prevails over the individual, and the idea of security is extended to all, not by virtue of paying in, but as a right of citizenship. Finally, Parijs identifies a third model inspired by Thomas Paine<sup>4</sup> and therefore referred to as Painean, where a standard basic income or citizen's wage is transferred unconditionally to all individuals, regardless of their social condition or whether they have paid into a social protection system. Here, the idea of equity sustains the argument. The goal is to "attribute equal purchasing power to all to be used in a competitive market" (Van Parijs, *idem.*, p. 70).

This different idea of equity has now led to the formulation of a new conceptual framework for social policies at the turn of this century, as an alternative to the welfare state system. Many contemporary thinkers, especially those in favour of adopting a minimum income or a negative income tax,<sup>5</sup> and also policy-makers, have included on the social agenda the guarantee of citizens' economic rights regardless of one's work or any other form of pay-in to the system. These rights refer not only to guaranteed

<sup>1</sup> dos Santos (1987, p. 37) defines social policies as follows: "A social policy is any policy that orders dramatic choices according to a consistent and coherent principle of justice".

<sup>2</sup> The reference here is not limited to material resources, an example cited is the issue of power.

<sup>3</sup> Scarcity alone is insufficient to explain the emergence of the issue of justice. Other "circumstances" are necessary for this issue to emerge, like egotism and pluralism

<sup>4</sup> Thomas Paine wrote *Agrarian Justice* in 1796, defending the notion that each individual, from birth onwards, should receive an unconditional income derived from his lack of access to assets like land, etc.

<sup>5</sup> John Friedmann, Eduardo Suplicy, and Antonio Maria, are some of the authors who explore negative income tax as a way of combating poverty and redistributing income. For the debate on this theme, see Lavinias and Varsano (1997). Amongst other reasons, the work-based society is shrinking day by day.

income, but to the assurance of accessing an initial endowment common to all, as illustrated by recent proposals, including that drafted by Ackerman and Alstott (1999).<sup>6</sup>

The notion of social protection - whatever the models - has nonetheless been heavily challenged since the mid-1980s, when both growing fiscal and demographic pressures and the expansion of guaranteed coverage for the potential target public fuelled challenges of the principle of justice as the cornerstone for redistributive models. A distinct philosophical focus has developed, where the issue is no longer the right to social protection coinciding with that of citizenship, but the necessary relationship between social benefits and citizens' responsibilities. According to Gilbert (1995), the question was the following: to what extent do the social rights granted by the Welfare State entail individual responsibilities? Thus reshaped, the debate shifts from the field of rights to that of individual responsibilities,<sup>7</sup> while the concept of morals is juxtaposed to that of justice, i.e., a morality imbuing rights with responsibilities. In short, the beneficiaries of transfers are expected to honour the social commitments required of them, or else suffer sanctions. Rights are now conditioned. Hence, the issue is no longer that of unconditional citizens' rights.

The debate over the best system for social transfers, the basis of which is the principle of justice, centers on another underlying principle, that of market logic. Rather than focusing only on the notion of redistribution, attempting to minimize its tradeoffs with welfare, this approach introduces the notion of efficiency - efficient redistribution - thus forging a new paradigm capable of dealing with the challenges raised by scarce resources in capitalist societies. Bowles and Gintis (1998) recall that the success of political movements and ideologies like socialism, radical democracy, social democracy, and others committed to the idea of equality, stems from the fact that they have translated "demands for redistributive justice into economic strategies". "Expenditures on land distribution, social protection, equal wage policies, central planning, and investment in human capital become attractive because they suggest that it is possible to link redistribution of economic advantages to improved performance by the economic system as a whole" (idem., p. 3). It is presumed that these two types of value - equity and efficiency - may be compatible or contradictory depending on the mechanisms used to generate more equity, i.e., as a function of the institutional design fostering more or fewer redistributive values. "To move towards a more equitable distribution of assets not only provides more equality in the welfare of individuals, but also, by increasing productivity, it increases the pie to be divided" (op. cit., p. 86).

<sup>6</sup> The authors propose to allot an endowment of US\$ 80,000 (transferred over the course of 4 years) to every individual who has completed secondary school, thereby guaranteeing truly equal opportunities within a context of free trade and economic opening. The underlying principle in this transfer is that of individual and collective responsibility in an environment of free choice (each beneficiary may "use the money as he or she wishes: open a business, invest in more education, purchase a house, or educate a family or save for the future." p. 5).

<sup>7</sup> Note that the concept of "employability" is also based on this. It is the responsibility of individual workers to increase their employability, i.e., to increase their individual aptitude for the labour market.

## 2. Compensatory programmes and their interpretation in the field of food security

Compensatory programmes are part of the institutional framework of social policies. They derive from social relief as practised originally by the Church. They are based on values of solidarity, indispensable in modern, heavily differentiated, and unequal societies,<sup>8</sup> since they allow for the mitigation of poverty by providing an increase in common welfare. But such programmes do not necessarily incorporate the values of equity. For this very reason, they tend to be selective and not universal. They stand out from among social policies committed to the quest for greater equity in that they serve a specific clientele, the poor. According to the classification proposed by Abranches (1992), this selectiveness, based on the criteria of need, is a form of positive discrimination. Such policies are generally specific and of limited duration, having a complementary and residual nature. Even so, they are absolutely essential to the target group, a needy population, whatever the need may be, an aspect which itself challenges the residual nature of the benefit allotted to them.

Compensatory programmes focusing on the struggle against hunger and malnutrition have a long-standing tradition in Brazil. Based on studies by Draibe, Castro, and Azeredo cited by Valladares (1999) identifies an important set of federal programmes established in the 1940s (the so-called Workers' Food Programme) and renewed for several decades, the goal of which was to reduce the risks of hunger and malnutrition.

Distribution of foodbaskets to the most needy has without doubt been the most commonplace institutional form of the compensatory approach to food security in Brazil, aimed at guaranteeing greater access to food by those whose income is insufficient to purchase an adequate diet in terms of calorie and protein intake.<sup>9</sup> In addition to this programme which was intended to be of limited duration but whose scale denotes both the persistence of the problem and the lack of efficacy in the approach to it, there have been other forms of public intervention in this area since the late 1990s, of a more structural type - like the school lunch programme and provision of foodstuffs to the health and social assistance network - or through subsidized marketing of foodstuffs and meals.<sup>10</sup>

Although persistent in their designs and modalities, compensatory programmes are acknowledged to be less than effective and/or efficient, adding little to the welfare of social groups suffering from food security risks and extreme poverty. Such

<sup>8</sup> The classic text by T. Marshall, *Social Class and Citizenship*, is one of the first to explain the link between social policy and citizenship.

<sup>9</sup> According to the CONAB (Brazilian National Council of Supply) website, PRODEA's balance sheet is positive, since the number of foodbaskets distributed by the government's Comunidade Solidária (Community Solidarity) programme increased from 3.1 million 1995 to 7.5 million in 1996 and 14.8 million in 1997, reaching a total of 29.8 million in 1998. The figure is surprising, since the programme is intended as an emergency relief intervention.

<sup>10</sup> Compensatory programmes are classified as structural, emergency, or subsidized-marketing (Lavinias, 1998) ch. III.

ineffectiveness ends up discrediting this type of intervention, increasingly viewed as futile by society at large. However, the scope of the destitution still jeopardizing Brazil's development today forbids one from ruling out compensatory measures that might truly alleviate poverty and guarantee a basic standard of living. On the contrary, it is crucial to provide such measures with consistency and to devise a new framework for them to gain in effectiveness.

In Western democracies, compensatory policies remain current and extensive, unquestionably indispensable, and taking the form of direct income transfers to families or individuals. Minimum or subsistence income and housing subsidy policies, and even those aimed at ensuring access to food, like the US Food Stamps Program,<sup>11</sup> all focus on covering income deficits. The vast majority<sup>12</sup> do not consist of the free provision of a service<sup>13</sup> or products in kind, but of a monthly monetary stipend, which may or may not be tied to the explicit purpose of granting the benefit (Rossi, 1998).

The opposite occurs in Brazil, since monetary income supplements are limited to a very few programmes such as that of lifetime monthly income - with broad coverage, true, but with a high degree of vertical inefficiency - and other negligible benefits distributed by the Federal Social Assistance Act (LOAS), in addition to some local scholarship programmes. Food supplement programmes for social groups at risk almost invariably use distribution of the benefit in kind (food commodities or in the form of meals).

The debate over the best modality for benefits - whether in kind or tickets<sup>14</sup> or through some income allotment - involves two opposing arguments, as noted by Ohls and Beebout (1993). The first emphasizes the advantage of the benefit in kind or in the form of tickets or stamps as opposed to a monetary stipend, since it leads the beneficiary families to consume larger amounts of food, the ultimate goal of such a relief policy. Several studies conducted in the United States conclude that Food Stamps lead to increased food consumption (Rossi, 1998, Fraker, 1990, Fraker, Martini and Ohls, 1995). This aspect is positive in that taxpayers and citizens view it favourably in general, who would not appreciate fostering consumption of other less essential goods, generating risk of leakage, and also because when families eat more food they probably improve their standard of living. The emphasis on this line of argument stems from the taxpayer's preference for the efficient use of public funds. In-kind benefits also tend to be supported by the farm lobby.

<sup>11</sup> Note that the Food Stamps Programme replaced a direct food commodities distribution programme.

<sup>12</sup> In the United States, the FSP (Food Stamps Programme) and the WIC (Special Supplemental Nutrition Programme for Women, Infants, and Children) provide a direct guarantee of stamps for beneficiary families, strictly tied to the acquisition of food in order to increase daily consumption. Still in force is the Emergency Food Assistance Programme, also based on subsidized food purchases. Meanwhile, the NSLP (National School Lunch Programme), SBP (School Breakfast Programme), and CCFP (Child Care Food Programme) transfer funds preferentially to participating schools and secondarily to low-income families selected as beneficiaries.

<sup>13</sup> For example, providing free housing in a government-owned building.

<sup>14</sup> Whether they are stamps, coupons, credit cards, or some similar modality.



The other approach, favouring allocation of a monetary stipend, lists a series of disadvantages to the in-kind approach: (a) constraints on the beneficiaries' freedom of choice in their use of the resources allocated to them, reducing the possible level of welfare for their families; (b) incitement to fraud by taking short-cuts in the administration of in-kind benefit; (c) and high administrative costs of in-kind benefits,<sup>15</sup> and (d) social stigma weighing on families or individuals who are more easily seen as indigents when receiving aid in kind.

Those in favour of adopting stipend-type benefits contend that it is essential to reduce the monetary deficit of the more vulnerable families, allowing them to live more comfortably, although this may involve major "leaks": according to estimates by American researchers (Rossi, *op. cit.*, p.4) every dollar transferred in the form of food stamps leads to a mean increase of 30 cents in food expenses, with the figure dropping to 10 cents on the dollar for no-strings-attached monetary stipends.

In Brazil, food commodity stockpiles for regulating minimum crop prices were used to guarantee low costs of foodstuffs distributed by the federal government in emergency work fronts. Although these stockpiles have been drastically reduced due to the opening of the Brazilian economy, thereby greatly increasing the cost of purchasing grain (at market prices) for distributing basic foodbaskets, this form of in-kind benefit still prevails in relief programmes. The cost of this approach has never been properly assessed<sup>16</sup> in any of the modalities now employed in compensatory programmes. The hypothesis tested in the following chapters is that the benefits provided by these programmes are marginal. It should also be mentioned that it is practically impossible to measure their nutritional impact.

The purpose of this article is to investigate whether, in the Brazilian case, the choice of monetary income-type benefits in programmes to combat food deficiency among at-risk groups should prevail over other models of the in-kind benefit type. First, we will estimate the overall food deficiency scenario in Brazil today, since it is people without food who form the potential target population for food security programmes and who normally use the in-kind benefits. In addition, we will correlate these data with the approximate annual cost and coverage of programmes like PRODEA. Second, we will take as our case study the State of Bahia, which has one of the broadest and most effective compensatory programmes in Brazil for subsidizing marketing of food produce, called the People's Foodbasket Programme (Lavinias, 1998, ch. III). The idea

<sup>15</sup> According to estimates in the United States, administrative costs of the Food Stamps Programme were 14 per cent of the total in 1996, split 50-50 between the Federal and State governments. If a monetary income transfer were adopted, there would be a yearly savings of 3 million dollars in a programme whose annual cost was US\$ 26 billion in 1996, reaching 25.5 million people, i.e., approximately 10 per cent of the total US population or 70 per cent of the poor population.

<sup>16</sup> A study on the Brazilian Northeast by the World Bank, published in December 1998 and entitled *Public Expenditures for Poverty Alleviation in Northeast Brazil: promoting growth and improving services* merely stated on page 43 that there is no available information for evaluating the degree of efficiency in targeted food handouts, showing once again that this type of policy (as implemented) fails to allow for any sort of evaluation concerning its qualities or flaws. In fact, even the Companhia Nacional de Abastecimento, or National Council of Supply (CONAB), which generates and coordinates the distribution of foodbaskets under the Federal programme, lacks a rigorous estimate of either its direct benefits or administrative costs.

is to assess the contribution of these programmes to reducing poverty in the target group, as compared to the argument according to which direct monetary income transfers are more effective. Finally, we will compare the cost of distributing a foodbasket under PRODEA with its retail equivalent in three major Brazilian cities for which we have the appropriate available data.

### **3. Scope of a programme to combat food deficiency**

The degree of food deficiency depends essentially on the family or individual income deficit, thus varying considerably as a function of the gap between disposable income and the minimum amount necessary for acquiring a given set of foodstuffs. Acute degrees of food deficiency can be a synonym for hunger, but does not necessarily take this form.

To estimate the number of families suffering some degree of food deficiency in Brazil, one needs to choose a cut-off line as the selection criterion for this group. There are various ways to draw such a line, depending on the variables to be aggregated (income, individual consumption, etc.).

In this study, we took the required 2,200 kcal daily intake recommended by the Food and Agricultural Organisation (FAO) as the minimum nutritional standard. To define the food deficiency cut-off line we calculated the cost of this intake based on the price of the 13 food products making up the official staple foodbasket under Brazilian Federal Act No. 399 of 1938, a price survey of which is performed monthly by the Joint Trade Union Department of Statistics (DIEESE) for 16 Brazilian cities.<sup>17</sup> We extrapolated these values to the urban areas of the Brazilian states, using as estimates the values for their respective capital cities, and in the absence of which, ascribing the value for the capital city closest to that state. To calculate values for rural areas, we subtracted 30 per cent<sup>18</sup> (Rocha, 2000) from the values for urban areas. Table 1 shows that as expected, the rural Northeast is the area which has the lowest cut-off line for poverty defined as food deficiency, while the urban South and Southeast have the highest lines. We should stress that the total estimate for Brazil was based on differences in regional prices (broken down by state and by rural versus urban areas). It is thus a regionally weighted total.

<sup>17</sup> The 13 products surveyed by the DIEESE are: sugar, coffee, boneless beef, rice, bread, bananas, tomatoes, beans, vegetable oil, margarine, milk and from these, the DIEESE surveyed the prices of products in the following cities: Florianópolis, Belo Horizonte, João Pessoa, Curitiba, Porto Alegre, Rio de Janeiro, Salvador, São Paulo, Brasília, Goiânia, Fortaleza, Recife, Belém, Vitória, Natal and Aracaju.

<sup>18</sup> This procedure is justified to the extent that we observed in other surveys that rural poverty is on average 30 per cent below that of urban poverty.

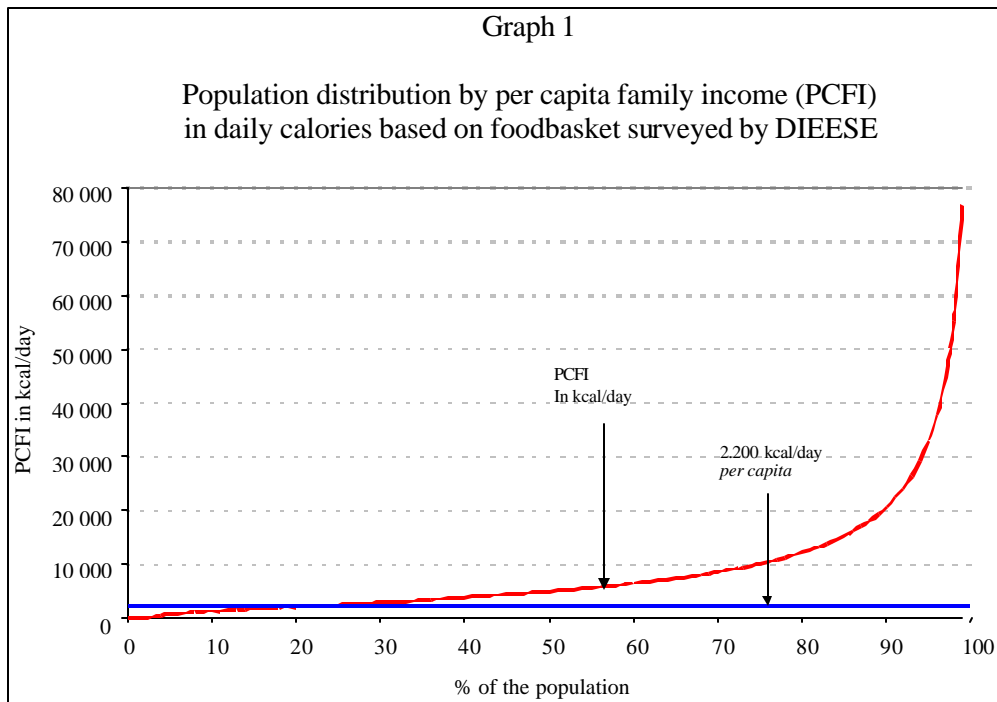
Table 1. Monthly cost of purchasing 2,200 kcalories a day at basic foodbasket prices, based on DIEESE survey prices

Region	State	Monthly cost of consuming Kcal / R\$	
		Rural	Urban
<b>Central-West</b>			
	Distrito Federal	40.05	57.22
	Goiás	35.81	51.15
	Mato Grosso	35.81	51.15
	Mato Grosso do Sul	35.81	51.15
<b>Northeast</b>			
	Alagoas	35.12	50.18
	Bahia	34.23	48.90
	Ceará	33.01	47.15
	Maranhão	33.01	47.15
	Paraíba	33.35	47.65
	Pernambuco	35.28	50.41
	Piauí	33.01	47.15
	Rio Grande do Norte	35.50	50.72
	Sergipe	35.12	50.18
<b>North</b>			
	Acre		53.27
	Amapá		53.27
	Amazonas		53.27
	Pará		53.27
	Rondônia		53.27
	Roraima		53.27
	Tocantins	37.29	53.27
<b>Southeast</b>			
	Espírito Santo	36.55	52.21
	Minas Gerais	41.12	58.74
	Rio de Janeiro	40.77	58.24
	São Paulo	44.56	63.65
<b>South</b>			
	Paraná	43.03	61.47
	Rio Grande do Sul	41.82	59.74
	Santa Catarina	36.82	52.60

Source: National Sample Household Survey (PNAD), 1997

Notes

1. Basic foodbasket according to Federal Act 399/1938, including, for the Northeast, 3kg sugar, 0,3kg coffee, 4,5kg boneless beef, 3,6kg rice, 6kg bread, 7,5kg bananas, 12kg tomatoes, 4,5kg beans, 0,9kg vegetable oil, 0,75kg margarine, 6 liters milk, and 3kg manioc flour, and for the other regions of Brazil, 3kg sugar, 0,6kg coffee, 6kg boneless beef, 3kg rice, 6kg bread, 7,5kg bananas, 9kg tomatoes, 4,5kg beans, 0,9kg vegetable oil, 0,75kg margarine, 6liters milk, 1,5kg wheat flour, and 6kg potatoes.
2. Prices surveyed for the capital cities in 1997 current values.
3. 1 US\$ = R\$ 1.09 in September 1997.



Based on the calculations of cut-off lines for food deficiency, we estimated the proportion of poor families, the mean gap per capita (i.e., the gap between the poverty line and the food deficiency cut-off line), the mean number of members in these families, the number of families, the total number of individuals, and the potential target public for a hunger eradication programme. For Brazil as a whole, some 21 per cent of the total population lack the necessary income to acquire their minimum daily calorie intake, as shown in Graph 1.

Table 2 shows that, the Northeast is the most critical region of Brazil, i.e., with the largest proportion of families suffering food deficiency, together with the State of Tocantins. According to the above criteria, over 7 million families would be included in the target group. A total of approximately 32 million individuals would benefit from such a programme.

Having estimated the target group for a national programme to combat food deficiency, it is necessary to calculate the monthly cost. We estimated the benefit to be allotted per family, since we contend that an income distribution programme should be conceived of in the family rather than in an individual context. Thus, we initially estimated the per capita gap, based on the mean number of family member (column 2 of Table 2). As shown in Table 3, for a mean benefit of R\$95.60, the programme would cost about R\$712 million a month, or some R\$8.5 billion a year.

Table 2. Target population of a national food deficiency eradication programme (2,200 Kcal)

Region	State	Percentage of all poor families	Mean per capita GAP (R\$)	Mean number members in poor families	Number of poor families	Approximate target population
Brazil		17.20%		4.36	7 447 535	32 474 575
Center-West						
	Distrito Federal	9.42%	33.98	3.90	48 676	189 597
	Goiás	13.41%	23.19	3.89	181 759	707 521
	Mato Grosso	13.63%	21.74	4.37	86 635	378 778
	Mato Grosso do Sul	13.25%	24.59	4.14	74 547	308 704
Northeast						
	Alagoas	28.19%	22.28	4.62	194 505	899 502
	Bahia	27.18%	19.25	4.73	903 310	4 269 070
	Ceará	30.39%	20.06	4.80	532 040	2 553 755
	Maranhão	39.23%	19.81	4.83	500 208	2 417 150
	Paraíba	27.39%	19.36	4.51	240 559	1 086 054
	Pernambuco	28.74%	21.63	4.49	554 786	2 489 946
	Piauí	37.82%	20.55	4.61	252 774	1 165 490
	Rio Grande do Norte	26.09%	22.19	4.51	171 051	771 213
	Sergipe	29.11%	22.14	4.34	120 184	521 109
North						
	Acre	24.21%	32.07	3.96	21 488	85 019
	Amazonas	22.80%	26.42	5.13	98 511	505 406
	Amapá	25.88%	31.60	4.55	21 941	99 728
	Pará	27.56%	26.44	4.55	209 217	951 318
	Rondônia	13.07%	25.63	4.29	27 113	116 296
	Roraima	8.67%	26.67	4.46	3 778	16 852
	Tocantins	30.64%	23.53	4.66	148 192	690 178
Southeast						
	Espírito Santo	15.89%	23.77	4.21	127 692	537 797
	Minas Gerais	16.72%	24.95	4.49	779 152	3 499 327
	Rio de Janeiro	9.19%	29.84	3.83	383 989	1 471 715
	São Paulo	9.10%	33.98	3.65	901 569	3 286 228
South						
	Paraná	16.09%	22.65	3.99	421 337	1 680 233
	Rio Grande do Sul	11.45%	27.95	4.00	341 223	1 364 599
	Santa Catarina	7.22%	24.53	4.07	101 299	411 991

Source: National Sample Household Survey (PNAD 1997)

Notes: 1. Prices surveyed for the capital cities in 1997 current values

2. 1 US\$= R\$ 1.09 in September 1997

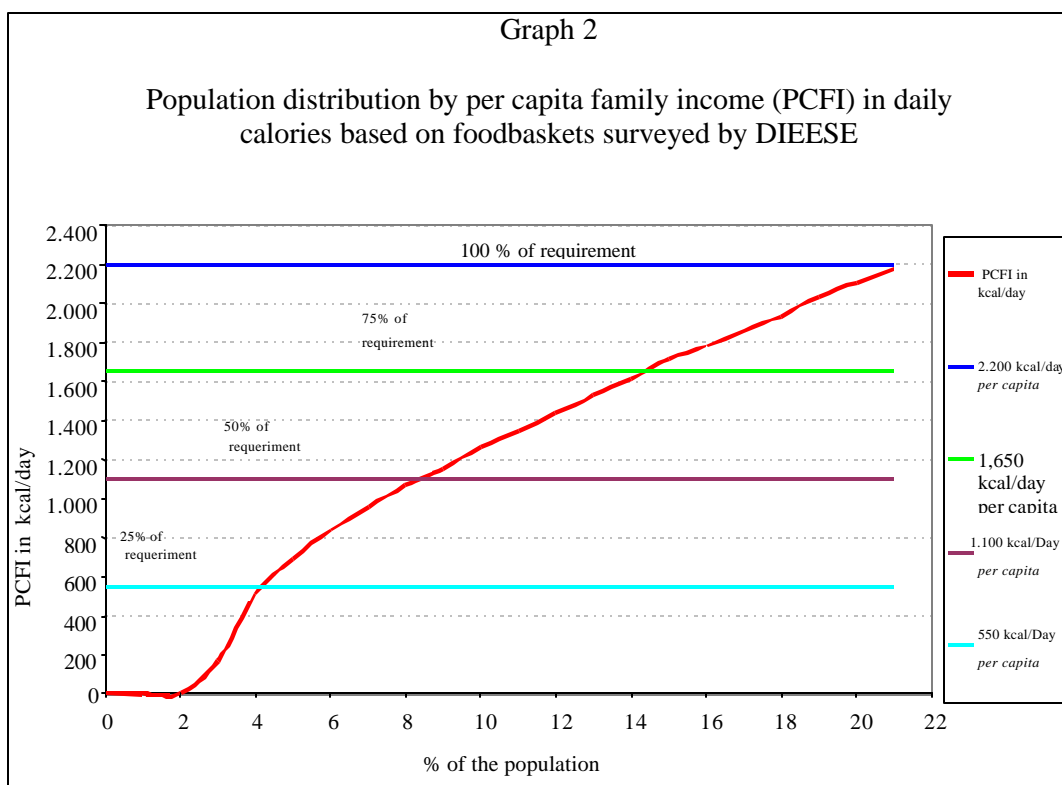
3. "Poor" families are those below the food deficiency cut-off line

4. Figures for target population calculated on more detailed information than shown in this table

Table 3. Estimated cost of a national food deficiency programme (2,200 kcal)

Region	State	Number of poor families	Mean benefit per family (R\$)	Benefit/ minimum wage ratio <sup>2</sup>	Estimated monthly cost by State (R\$)
Brazil		7 447 535	95.6	0.8	711 701 294
Center-West					
	Distrito Federal	48 676	113.5	1.0	5 524 142
	Goiás	181 759	81.3	0.7	14 778 461
	Mato Grosso	86 635	82.8	0.7	7 169 826
	Mato Grosso do Sul	74 547	91.5	0.8	6 823 436
Northeast					
	Alagoas	194 505	93.5	0.8	18 176 298
	Bahia	903 310	84.3	0.7	76 103 868
	Ceará	532 040	91.7	0.8	48 789 132
	Maranhão	500 208	92.5	0.8	46 262 237
	Paraíba	240 559	84.2	0.7	20 243 521
	Pernambuco	554 786	90.1	0.8	49 995 650
	Piauí	252 774	91.7	0.8	23 184 431
	Rio Grande do Norte	171 051	89.0	0.7	15 227 473
	Sergipe	120 184	90.7	0.8	10 900 689
North					
	Acre	21 488	113.9	1.0	2 446 989
	Amazonas	98 511	120.0	1.0	11 821 320
	Amapá	21 941	120.0	1.0	2 632 920
	Pará	209 217	107.1	0.9	22 409 442
	Rondônia	27 113	100.6	0.8	2 728 571
	Roraima	3 778	92.5	0.8	349 265
	Tocantins	148 192	98.3	0.8	14 561 198
Southeast					
	Espírito Santo	127 692	90.3	0.8	11 524 714
	Minas Gerais	779 152	103.3	0.9	80 501 985
	Rio de Janeiro	383 989	97.8	0.8	37 566 796
	São Paulo	901 569	113.1	0.9	101 958 438
South					
	Paraná	421 337	87.5	0.7	36 858 561
	Rio Grande do Sul	341 223	101.6	0.9	34 664 162
	Santa Catarina	101 299	83.9	0.7	8 497 771
Total annual cost, Brazil					8 540 415 523
Source: National Sample Household Survey (PNAD 1997)					
Notes: 1. Prices surveyed for the capital cities in 1997 current values.					
2. The value of the monthly minimum wage in September 1997 was R\$ 120,00.					
3. When the value of the monthly benefit is more than the minimum wage, the benefit is set at one minimum wage.					
4. 1 US\$= R\$ 1.09 in September 1997					
5. Figures for target population calculated on more detailed information than shown in this table					

Since full relief for the poor entails an enormous cost, we performed several simulations to illustrate various scenarios of the degree of satisfaction of calorie requirements, in order to establish the optimum cost-benefit relationship. Graph 2 illustrates the distribution of the target groups in the various food deficiency brackets: 4 per cent of the Brazilian population fail to consume even 550 kcal/day, i.e., they fail to meet even 25 per cent of the minimum daily requirement. The figure increases to 8 per cent for 50 per cent of the minimum daily calorie requirement and 14.5 per cent for 75 per cent of the required daily intake.



Tables 4 and 5 repeat the calculations shown in Tables 2 and 3, but are based in meeting only 75 per cent of the required intake of calories. Based on this option, we calculated the target population and cost of programme adjusted to the 1,650 kcal cut-off line. The proportion of poor/needly families thereby drops to 11 per cent. The target group, in turn, drops from 32 million to 21 million. In relation to the mean monthly benefit transferred to families, there is a reduction of almost 20 per cent, from R\$95.56 to R\$76.22. The overall cost of the programme is reduced to R\$384 million a month or R\$4.6 billion a year. In other words, 68 per cent of the demand would be met with a little over 54 per cent of the funds needed for full coverage. (Tables 3 and 5). The difference between the 100 per cent scenario and the 75 per cent scenario is summarised in Table 6. This table leads one to conclude that coverage of 75 per cent of the FAO-defined minimum daily calorie intake would be quite reasonable, since the degree of coverage would be high (virtually 70 per cent of the target population under the full programme, or 5 million families), while the cost would be half that of a programme targeting full satisfaction of the minimum daily calorie intake.

Table 4. Adjusted\* target population for a national food deficiency eradication programme (1,650 kcal)

Region	State	Percentage of all poor families	Mean per capita GAP (R\$)	Mean number members in poor families	Number of poor families	Approximate target population
Brazil		11.7%		4.3	5 043 746	21 815 917
Center-West						
	Distrito Federal	7.3%	27.71	3.58	37 785	135 353
	Goiás	7.9%	23.08	3.76	106 429	400 413
	Mato Grosso	8.5%	20.21	4.22	53 727	226 996
	Mato Grosso do Sul	8.8%	21.73	4.03	49 379	198 787
Northeast						
	Alagoas	19.6%	18.4	4.6	134 874	619 189
	Bahia	18.1%	15.3	4.7	602 087	2 864 315
	Ceará	21.3%	16.0	4.9	373 384	1 821 371
	Maranhão	28.6%	15.4	4.9	364 076	1 796 639
	Paraíba	19.2%	15.0	4.6	168 791	783 303
	Pernambuco	19.0%	18.1	4.6	367 049	1 670 469
	Piauí	28.1%	15.9	4.6	187 879	869 269
	Rio Grande do Norte	17.1%	19.4	4.5	112 222	503 272
	Sergipe	19.9%	18.3	4.4	82 312	360 544
North						
	Acre	19.3%	24.3	4.0	17 128	68 195
	Amazonas	15.3%	22.6	5.1	15 628	78 852
	Amapá	18.4%	27.7	4.3	65 899	281 787
	Pará	18.0%	22.7	4.4	136 292	599 580
	Roraima	6.0%	22.6	4.0	2 616	10 462
	Tocantins	20.4%	19.4	4.6	98 522	448 873
Southeast						
	Espírito Santo	10.6%	20.7	4.1	84 966	351 174
	Minas Gerais	12.1%	18.9	4.4	562 250	2 489 013
	Rio de Janeiro	6.4%	25.4	3.5	268 682	942 109
	São Paulo	6.0%	33.0	3.5	590 067	2 077 077
South						
	Paraná	9.3%	20.8	4.1	243 994	993 165
	Rio Grande do Sul	8.0%	22.8	3.8	237 583	911 271
	Santa Catarina	4.5%	24.5	3.8	62 814	237 676

Source: National Sample Household Survey (PNAD 1997)

Notes: 1. Prices surveyed for the capital cities in 1997 current values. 2. 1 US\$= R\$ 1.09 in September 1997

\* 1.650 kcal=75% of calorie requirement



Table 5. Cost of adjusted (75%) national food deficiency eradication programme (1,650 kcal)

Region	State	Number of poor families	Mean benefit per family (R\$)	Benefit/minimum wage ratio <sup>2</sup>	Estimated monthly cost by State (R\$)
Brazil		5 043 746	76.22	0.64	384 413 009
Center-West					
	Distrito Federal	37 785	85.6	0.7	3 234 434
	Goiás	106 429	75.8	0.6	8 067 425
	Mato Grosso	53 727	71.4	0.6	3 834 496
	Mato Grosso do Sul	49 379	76.2	0.6	3 762 433
Northeast					
	Alagoas	134 874	72.8	0.6	9 815 590
	Bahia	602 087	63.2	0.5	38 075 982
	Ceará	373 384	70.6	0.6	26 365 764
	Maranhão	364 076	70.5	0.6	25 669 178
	Paraíba	168 791	63.6	0.5	10 740 003
	Pernambuco	367 049	71.6	0.6	26 261 989
	Piauí	187 879	69.5	0.6	13 049 136
	Rio Grande do Norte	112 222	72.2	0.6	8 105 907
	Sergipe	82 312	71.8	0.6	5 907 450
North					
	Acre	17 128	79.9	0.7	1 368 185
	Amazonas	15 628	99.7	0.8	1 557 955
	Amapá	65 899	98.4	0.8	6 484 396
	Pará	13 292	85.0	0.7	11 577 733
	Rondônia	17 311	80.0	0.7	1 375 376
	Roraima	2 616	66.7	0.6	174 474
	Tocantins	98 522	75.1	0.6	7 403 337
Southeast					
	Espírito Santo	84 966	73.9	0.6	6 279 242
	Minas Gerais	562 250	74.1	0.6	41 672 283
	Rio de Janeiro	268 682	75.9	0.6	20 395 113
	São Paulo	590 067	104.2	0.9	61 483 801
South					
	Paraná	243 994	75.8	0.6	18 495 965
	Rio Grande do Sul	237 583	77.6	0.7	18 445 944
	Santa Catarina	62 814	76.6	0.6	4 809 417
Total annual cost, Brazil					4 612 956 107

Source: National Sample Household Survey (PNAD 1997)

Notes: 1. Prices surveyed for the capital cities in 1997 current values.

2. The value of the monthly minimum wage in September 1997 was R\$ 120,00.

Table 6. Comparison of the cost of two calorie intake scenarios

% of FAO requirement	Calorie intake	Number of Families	Annual Cost (R\$)
75%	1 650 Kcal	5 043 746	4 612 956 107
100%	2 200 Kcal	7 447 535	8 540 415 523

Note: 1US\$ = 1.09 in September 1997

What remains to be determined is the impact of such a programme on the public deficit, considering its possible implementation before deactivation of other similar (but highly inefficient and less effective) programmes, whose funds could be reallocated (perhaps to a fund) with a view towards a direct monetary income transfer to the target group.

Table 7. Estimated impact of the income distribution programme on the expected public budgetary deficit – Brazil 1999

Estimated GDP, 1999	R\$ 1 trilhão
Expected 1999 public deficit as % of GDP	8.0%
Expected 1999 public deficit in reals (R\$)	R\$ 80 bilhões
Cost of implementing the income distribution programme to meet 75% of required kcal intake <sup>1</sup>	R\$ 5 bilhões <sup>2</sup>
Impact of the income distribution programme as % increase in public budgetary deficit	0.5%

Sources: GDP market analysts; deficit - market analysts; income distribution programme - Lavinias, L. and staff. IPEA.

Notes:

1. The required daily calorie intake is determined by FAO.

2. Figures updated to June 1999 according to General Prices Index (Getulio Vargas Foundation)

As shown in Table 7, implementation of the programme, whose current cost in 1999 reals would be R\$5 billion a year, would represent 6 per cent of Brazil's predicted R\$ 80 billion 1999 deficit and increase the public deficit from 8 per cent to 8.5 per cent of GDP.

#### 4. The Brazilian experience with hunger eradication programmes: the case of PRODEA

Several programmes exist in Brazil aimed at reducing food deficiency among vulnerable social groups, with an emergency relief design. One of these is the so-called Federal Emergency Food Distribution Programme, or PRODEA.

PRODEA was created in 1993 as an emergency measure to provide relief for the low-income population hit by a drought in northern Minas Gerais State and the Northeast region of Brazil. Later, the list of counties was expanded based on the Hunger Map drafted by IPEA (1993). In 1995, PRODEA became part of the Community Solidarity programme, which has since been responsible for PRODEA's administration, in conjunction with CONAB.

CONAB is in charge of implementing the programme. Its roles include: defining the locations for warehouses used to distribute food commodities to the counties; logistical support, ranging from purchasing the commodities to distributing them to the counties; and quality control. CONAB also monitors and implements decisions by CONEX, the top agency in charge of monitoring PRODEA, with representatives from the Federal government.

In CONAB, the Programme includes participation by local governments and civil society, the latter represented by a committee in each county. It is usually the county committee that selects and enrolls families, in addition to drafting monthly reports for CONEX. The committee is in charge of organizing foodbasket distribution. As for the local governments, their main responsibilities are to set up the county committees and transport the food commodities from the CONAB warehouses to the sites where the food is distributed in the county.

The conditions for enrolment in the programme usually involve education (for example, participating in literacy training programmes, enrolling children in school, etc.), health (showing the children's vaccination cards, etc.), or community work projects, among others.

The PRODEA approach is a compensatory, distribution of foodbaskets. It has undergone structural changes since it first began operations, due primarily to difficulties in obtaining food commodities from government stockpiles. As shown in Table 8, between 1995 and 1997 two more commodities were added to the foodbasket (manioc flour and macaroni), but there has still been a decrease in the total amount of food provided and especially in the calorie content, with a drop of 20% from 1995 to 1996 and virtually levelling off from 1996 to 1997.<sup>19</sup>

Table 8. Contents of PRODEA monthly foodbasket per person

	1995		1996		1997	
	Kg	Kcal	Kg	Kcal	Kg	Kcal
Rice	10	35 686	10	35 686	10	35 686
Beans	5	16 359	5	16 359	5	16 359
Manioc flour	-	-	5	17 700	2	7 080
Corn flakes	15	53 100	5	17 700	5	17 700
Macaroni	-	-	-	-	3	11 070
Total foodbasket	30	10 5145	25	87 445	25	87 895

Sources: CONAB and Multicenter Study, UNICAMP

(1) - In force as in April 1997

Table prepared by L. Lavinás and staff, IPEA

Table 9 shows the PRODEA foodbasket's mean per capita calorie content state-by-state in 1997, based on the number of members in poor families, according to data from the National Sample Household Survey (PNAD/97). Note that the calorie content is lower in Maranhão (14.9 mil kcal/month) as compared to São Paulo, for example (19 mil kcal/month). The overall figure for Brazil is 16.647 kcal/month.

<sup>19</sup> In 1998 there was a change in the foodbasket content. The new menu included 5kg of rice, 5kg of beans, 5kg of corn flakes, 3kg of macaroni, 1 kg of manioc flour, 1kg of sugar, and 2 liters of vegetable oil. The new calorie content was in the order of 84,000 kcal.

Table 9. Calories provided by PRODEA foodbasket in 1997

State	Number of poor families	PRODEA total kcal/month	PRODEA kcal/per capita/ month	PRODEA kcal/per capita/ day
Acre	4.89	87 895	17 975	599
Alagoas	5.75	87 895	15 287	510
Amazonas	6.33	87 895	13 880	463
Amapá	5.55	87 895	15 828	528
Bahia	5.73	87 895	15 342	511
Ceará	5.83	87 895	15 068	502
Brasília	4.71	87 895	18 680	623
Espírito Santo	5.00	87 895	17 579	586
Goiás	4.59	87 895	19 132	638
Maranhão	5.87	87 895	14 980	499
Minas Gerais	5.33	87 895	16 504	550
Mato G. Sul	5.02	87 895	17 521	584
Mato Grosso	5.30	87 895	16 585	553
Pará	5.58	87 895	15 754	525
Paraíba	5.44	87 895	16 148	538
Pernambuco	5.39	87 895	16 305	544
Piauí	5.47	87 895	16 078	536
Paraná	4.82	87 895	18 254	608
Rio de Janeiro	4.70	87 895	18 712	624
Rio G. Norte	5.45	87 895	16 120	537
Rondônia	5.27	87 895	16 678	556
Roraima	5.17	87 895	16 996	567
Rio G. Sul	4.76	87 895	18 467	616
Santa Catarina	4.94	87 895	17 804	593
Sergipe	5.23	87 895	16 792	560
São Paulo	4.51	87 895	19 478	649
Tocantins	5.67	87 895	15 512	517
BRAZIL	5.28	87 895	16 647	555

Source: National Sample Household Survey

Table prepared by Lavinias and staff. IPEA

In 1995, the PRODEA foodbasket provided 105 thousand kcal/month, dropping to approximately 88 thousand kcal/month by 1997, or a reduction in calories of some 17 thousand kcal, almost the equivalent of the monthly per capita quota for Brazil. In other words, the equivalent of one member per family has been cut out of the food handouts.

With regard to the programme's scope, its activities were expanded extensively during the 1995-1998 period. As shown in Table 10, the number of counties served increased from 583 in 1995 to 2,254 in 1998, or an average annual growth of approximately 57 per cent.

There was even heavier growth in the number of foodbaskets distributed: from 3.1 million in 1995 to nearly 28.7 million in 1998, or an annual increase of some 110 per cent. There was also an increase in the target group with the addition of indigenous communities and landless encampments and the number of foodbaskets distributed to them.

The question remains as to what extent the programme has succeeded in reaching its target population.

Table 10. Relief interventions, PRODEA

	No. Interventions				Annual growth rate
	95	96	97	98	
Municipalities	583	1 094	1 344	2 254	57%
Indigenous communities		200	386	705	88%
Landless encampments		283	903	824	71%
Rubber tappers/Amazonian Solidarity					
Others <sup>1</sup>					
<b>TOTAL</b>	<b>583</b>	<b>1,577</b>	<b>2,633</b>	<b>3,783</b>	<b>87%</b>
	No. Foodbaskets distributed				Annual growth rate
	95	96	97	98	
Municipalities	3 073 365	7 240 227	14 236 551	28 660 563	110%
Indigenous communities	4 075	100 703	180 291	284 999	312%
Landless encampments	25 086	252 945	416 433	797 744	217%
Rubber tappers/Amazonian Solidarity			7 418	31 218	321%
Others <sup>1</sup>				28 510	
<b>TOTAL</b>	<b>3 102 526</b>	<b>7 593 875</b>	<b>14 840 693</b>	<b>29 803 034</b>	<b>113%</b>

Notes:  
1. Special interventions for families affected by forest fires in Roraima, acid spill from ship *Bahamas* in São José do Norte, Rio Grande do Sul.  
Source: GEPRE/SUPRI/DIPRI-CONAB and L. Lavinás, IPEA, 1999.

Table 11 shows the nationwide figures for the programme's coverage.<sup>20</sup> Taking as its focus the number of families which (according to the National Sample Household Survey-PNAD/97) lacked the income needed to acquire 2,200 kcal per capita per day, the coverage (total 1) for PRODEA is 15.9 per cent (the ratio between the mean number of foodbaskets distributed per month and the number of families at risk of food deficiency). Not counting the provision to indigenous communities and landless settlements, Amazonian Solidarity, and other special handouts, this percentage increases to 16.6 per cent (total 2) which is still far short of the potential demand.<sup>21</sup>

<sup>20</sup> We chose to estimate two totals based on the mean number of poor families, estimated from the National Sample Household Survey (PNAD), which does not collect data from the Northern Region of the country.

<sup>21</sup> However, since we also know that PRODEA does not have a nationwide scope and only works in some counties, we estimated its coverage considering only the counties where the foodbaskets are actually distributed. To do this, we constructed a coverage index with the following approximation: we considered the total number of families benefitted per county for the last year with available data (1998) as compared to the number of families with a per capita family income below the cost of 2200 Kcal in 1991. We lack data more recent than 1991 (when the last National Census was held in Brazil) to calculate per capita family income by county. To estimate coverage for the 1353 counties benefitted in 1998 we only considered 1042, due to county reapportionment (hampering subsequent geographic comparison) between 1991 and 1998. The programme's coverage increased to some 50 per cent in these counties. Given the incompatibilities in the reference data, we opted to discard this approximation, since it proved impossible to estimate it more rigorously.

Table 11. Coverage

	1997	Total 1	Total 2
Number of poor families		7 447 535	7 447 535
Mean number of breadbaskets distributed/month		1 186 379	1 236 724
Coverage (%)		15.9%	16.6%
Note:			
Total 1 does not include foodbaskets distributed to indigenous communities, landless encampments and to rubber tappers through the Amazonian Solidarity Programme.			
Total 2 includes all cited above			
Source: SUPRI/DIPRI/CONAB and L. Lavinás, IPEA, 1999			
Table prepared by Lavinás and staff, IPEA			

In order to estimate the programme's efficacy and efficiency, we assessed its cost structure. For foodbasket distribution, CONAB reports having spent approximately R\$296 million in 1997. Table 12, listing CONAB's expenditures and budget percentages with PRODEA, shows that the item "staff" consumes the largest portion of the programme's budget, followed by stockpiling (outlay of funds for food commodities for the CONAB price-regulatory stockpile), purchases (acquisition of food commodities on the local market), and overheads (freight costs, storage, etc.).

Table 12. CONAB costs with PRODEA in R\$, December 1997

	1997
Overheads	4 515 424
Purchases	35 517 575
Stockpiling (1)	113 555 413
Staff (2)	142 385 736
Total Cost (Less staff)	153 588 412
Total Cost, with staff, not including Brasília	295 974 148
Notes:	
1. Stockpiling by CONAB includes transfer of funds to regulate costs of food crop commodities (including freight, storage costs and interests) vis-à-vis market prices.	
2. Estimate of programme costs including total staff in CONAB regional offices and excluding staff in Brasília.	
Source: SUPRI/DIPRI/CONAB and Lavinás, IPEA, 1999.	
Tables prepared by Lavinás and staff, IPEA.	

Since PRODEA is part of a larger administrative structure, involving other activities besides foodbasket distribution, not all the CONAB staff performs activities directly linked to implementing the programme. To estimate staff expenses, we adopted the following procedure; with data from CONAB itself to account for personnel. While in the regional CONAB offices the employees are clearly involved in the programme, the same is not true to the same extent for employees allocated to the central office in Brasília. Thus, for a better estimate of the amount actually expended on CONAB staff for PRODEA, we calculated the mean wages of CONAB employees and then subtracted

from the item “staff expenditures” the amount corresponding to the central office in Brasília.<sup>22</sup>

Based on estimated total costs, we calculated the unit cost per foodbasket distributed in the year 1997. Table 13 shows that without including the overall cost of staff expenditure in 1997, the Federal government spent R\$10.35 per foodbasket distributed. Adding on the staff item, the unit cost almost doubles, to R\$19.94.

**Table 13. Cost per foodbasket distributed in R\$, December 1997**

1997	
Total PRODEA cost (less staff)	153 588 412
Total PRODEA cost (with staff) (1)	295 974 148
Number of foodbaskets distributed	14 840 693
Cost of foodbasket (without staff)	10.35
Cost of foodbasket (with staff)	19.94

1. Estimate of Programme cost including total staff in CONAB regional offices and excluding Brasilia  
Source: SUPRI/DIPRI/CONAB and Lavinias, IPEA, 1999.  
Table prepared by Lavinias and staff, IPEA.

In addition to Federal expenditures on the programme, according to our field research in the State of Bahia under the Food Safety and Decentralization project (Lavinias, 1998), there were expenditures at the local level involving transportation of food commodities from the CONAB warehouses and the distribution points. The amounts found in Table 14 show an increase on the previously estimated figure by only 0.2 per cent.

**Table 14. Cost per foodbasket distributed plus local costs in R\$, December 1997**

Total PRODEA cost (less staff)	153 588 412
Total PRODEA cost (with staff) (1)	295 974 148
Total local costs (2)	524 500
No. of foodbaskets distributed	14 840 693
Costs of foodbaskets (without staff)	10.38
Costs of foodbasket (with staff)	19.98

Notes:  
1 - Estimate of Programme costs including total staff in CONAB regional offices and excluding staff in Brasilia.  
2 - Estimated expenditures by all municipalities on distribution of PRODEA foodbaskets. The value was estimated based on a field survey in Bahian municipalities under the research project "Food Security and Decentralization", carried out by Lena Lavinias and all, at IPEA  
Source: SUPRI/DIPRI/CONAB and Lavinias, IPEA, 1999.  
Table prepared by Lavinias and staff, IPEA.

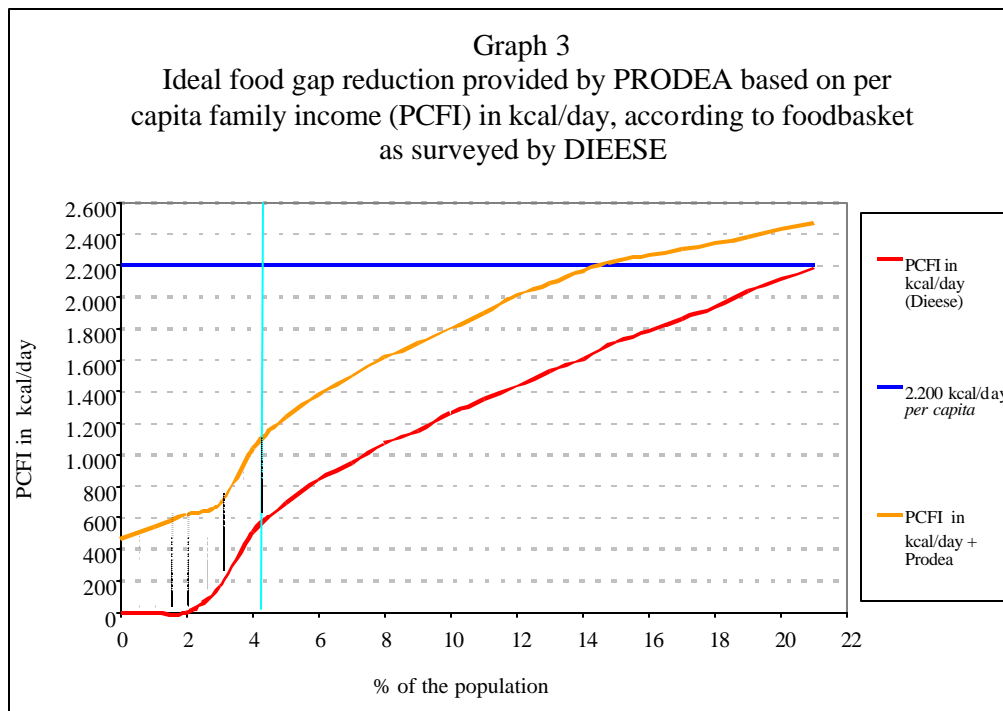
<sup>22</sup> This approximation is not ideal, but it serves the purposes of this methodology.

According to these data, the final cost estimate for distribution of a foodbasket by the Brazilian Federal Government through PRODEA in 1997 was R\$19.98. Thus, almost twice the value of the food commodities (R\$9.60) was spent on their distribution with staff revealing extremely high inefficiency costs.

Still, what is PRODEA's degree of efficacy in relation to reducing the food gap for beneficiary families?

It is difficult to estimate the degree of efficacy, especially since we lack a specific evaluation of the programme's approaches to targeting, which vary from one county to another. Therefore, one cannot assume that the programme actually serves those at greatest risk of hunger, nor can one identify the place occupied by each beneficiary family on the distribution curve (according to income) for the potential target group. With this constraint in mind, we decided nevertheless to estimate the impact of ideal targeting in increasing the calorie intake provided to families, i.e., 555 kcal/day/per capita for Brazil, on average.

Graph 3 shows the per capita family income (PCFI) converted into kcal/day, in addition to the calorie supplement provided by PRODEA. Assuming that the 21 per cent target group benefited by PRODEA (see graph 1) are really concentrated in the lower one-fifth (vertical) of the income distribution curve, the mean gap between the individuals and the 2,200kcal/day line would decrease from 45 per cent to 39 per cent, a reduction of some 13 per cent in this population's degree of food deficiency.



However, we know that such an estimate is not realistic, since targeting is rarely fully accurate. In addition, one should consider the possibility of food commodities not reaching the beneficiaries, and waste in the consumption of the donated grain, thus further reducing the calorie supplement. In fact, there has been criticism over the quality



of the food handouts (rice and beans), which are difficult to cook, leading to waste.<sup>23</sup> More probably, the PRODEA beneficiary population is scattered along the entire distribution (lower) curve in Graph 3, so that the Programme has different (less effective) results than those presented here.

In short, this exercise revealed major distribution inefficiencies, low efficacy, and limited coverage, indicators of the Programme's ineffectiveness in combating poverty.

## **5. Comparing the advantages of different compensatory food security programmes**

To reflect on PRODEA's degree of efficiency, we compare the food commodities distributed by PRODEA with that established under Federal Act 399/1938.

We will take the case of Bahia, where there is a compensatory food security programme based on the subsidized sale of food commodities, known as the Cesta do Povo ("The People's Foodbasket"). Although this programme is neither free nor targeted, it does have a major regulatory effect on the retail food market in the State, in addition to its compensatory impact.

The government of the State of Bahia, as part of its line of compensatory policies, with a statewide network of outlets for subsidized sales of food commodities, cleaning materials and personal hygiene products, runs the People's Foodbasket. The programme was established in 1979, with the purpose of serving the low-income population through direct marketing of the above-mentioned products. The idea is that they be sold below the respective market prices.

There are currently 409 fixed People's Foodbasket stores in operation, 64 of which are located in the Greater Salvador Metropolitan Area and 345 in the interior of the State, thus covering the vast majority of the counties in Bahia (341 out of a total of 415). With this large number of points of sale and geographic scope, the programme guarantees a highly capillary food supply network. It is estimated that the People's Foodbasket reaches some one million families, or approximately one-third of the State's population.

Although created to serve the low-income population, the programme dispensed with targeted distribution and is thus open to the public at large. In practice, the characteristics of the stores' infrastructure, the lack of "convenience",<sup>24</sup> and the limited product mix have acted as a targeting mechanism. In some towns in the interior, the People's Foodbasket is even more important than in Salvador, since it is virtually the only large retail option for purchasing foodstuffs and cleaning and hygiene products. What prevails in these rural counties is a poorly diversified marketing structure, with

<sup>23</sup> These comments are based on field research for the project *Segurança Alimentar e Descentralização: novos rumos para as políticas públicas* conducted in various counties in the State of Bahia.

<sup>24</sup> The products are not packaged. Some 93 products are sold, including 57 food products, with the rest divided among personal hygiene and cleaning products and kitchen utensils.

small grocery stores selling on credit, with high profit margins, often including interest rates.<sup>25</sup>

Table 2 shows how it is possible to characterize a potential target group for a Bahian food deficiency eradication programme. Some 27 per cent of the overall Bahian population experience some degree of food deficiency, generating a potential target group of 4.3 million individuals or 903,310 families, based on the National Sample Household Survey (PNAD) estimate for 1997. According to 1997 data, PRODEA served 220,238 families in 98 Bahian counties, or some 30 per cent of the food deficient population.

How much would it cost to purchase the foodstuffs distributed by PRODEA in the People's Foodbasket network?

Table 15 compares the costs of the PRODEA foodbasket with the same commodities through the People's Foodbasket. It is R\$3.83 cheaper to purchase the same foodbasket through the People's Foodbasket. Calorie-wise, in December 1997, spending R\$19.98 in a People's Foodbasket store, a family would obtain 24 per cent more calories than from the mix distributed by PRODEA.

In daily per capita terms, this represents an additional 123 calories for the target population of the Bahian programme. The PRODEA benefit provides 511 kcal/day per capita, considering the mean number of family members in the state of Bahia. If the same foodbasket were purchased in the People's Foodbasket chain, this supplement would increase to 634 calories.

Table 15. PRODEA calories at people's foodbasket prices

Cost of PRODEA foodbasket	R\$19.98
Cost of PRODE A foodbasket at People's Foodbasket prices	R\$16.15
Calories provided by PRODEA	87,895.43
Calories from PRODEA foodbasket if R\$ 19,98 were spent at People's Foodbasket	108,739.99
Extra-calories provided in People's Foodbasket values compared to PRODEA	24%

Source: CONAB and EBAL

Thus, if the PRODEA food distribution were replaced by its equivalent in monetary income, the Federal government would be providing a greater benefit in terms of food access for families who would spend such a stipend in the People's Foodbasket. Using the required 2200 kcal/day intake as the cut-off line, the proportion of people with food deficiency would remain unaltered, but the intensity of the deficit would drop from 42 per cent to 36 per cent. Adding the calorie supplement provided by the People's Foodbasket, this figure would be 35 per cent, showing a slight improvement.

<sup>25</sup> According to the survey, the programme's compensatory side had become depleted, because the gap had decreased between prices in the People's Foodbasket network and the retail market, making the former less attractive. The People's Foodbasket gradually failed to guarantee greater access to food for its clientele, especially for staples. What actually led to this distortion was the inadequate targeting of the subsidy transferred by the State government to the People's Foodbasket network, i.e., the subsidy was increasingly channelled towards products used less frequently by the needy population. In January 1999 the programme's administration corrected this distortion and improved its performance from the standpoint of the benefit transferred to the target population.

This difference between the calorie supplements from the People's Foodbasket and PRODEA is indeed slight. However, there are other advantages to the People's Foodbasket as compared to PRODEA:

- There is a reduction in the degree of inefficiency, since PRODEA's expenditures involve a high administrative cost (practically 100 per cent of the food commodity purchase price), unlike the People's Foodbasket.
- Allocation of the benefit through purchases in the People's Foodbasket tends to be better, due to the beneficiaries' greater degree of freedom in choosing the food products most appropriate for them, thus reducing waste and increasing well being.

Table 16. Effect of distribution of PRODEA foodbaskets on the reduction of calorie deficit to the poor population in the State of Bahia

Vis à vis 2.200 kcal line	% of individuals below the 2.200 kcal/day line (P0)	Per capita income gap (P1)
PCFI in kcal/day	0.35	0.42
PCFI in kcal/day + PRODEA calories	0.35	0.36
PCFI in kcal/day + PRODEA calories + People's Foodbasket differential	0.35	0.35

Source: National Sample Household Survey (PNAD, 1997)

Notes:

1. Prices surveyed for the capital cities in 1997 current values.
2. Converted per capita family income based on prices of foodbasket surveyed by DIEESE
3. Per capita family income in kcal/day, plus calories provided by PRODEA foodbasket
4. Per capita family income in kcal/day, plus calories provided by PRODEA foodbasket and calorie differential through purchase at Peoples' Foodbasket

As for the disadvantages, without a doubt the most relevant one is the use of two subsidies, one with the People's Foodbasket itself and the other with an income transfer. The final purpose of the two benefits is virtually identical, and would lead to an even greater increase in social expenditures. The question is thus whether it would be appropriate to maintain both subsidies. It may be possible to keep both in Bahia, given the characteristics of the People's Foodbasket, which in fact recently re-targeted the public subsidy for basic food commodities, thus increasing the benefit transferred to the population. But the Bahian case cannot be extended to the country as a whole. It remains to be seen if, in case PRODEA is deactivated and replaced by a direct income transfer, access would be guaranteed in the general retail market or if there would be a loss of the benefit due to increased prices.

## 6. PRODEA versus the retail market

In this section we compare the estimated cost of the PRODEA foodbasket with the market prices surveyed in three Brazilian state capitals, in order to determine whether a monetary stipend rather than foodbaskets would succeed in ensuring the same degree of access to food. This would be possible since economic stabilization has led to a heavy

reduction in price differentials between the retail market and subsidized public programmes.

Table 17 shows retail prices in three state capitals (Curitiba, Belo Horizonte, and Salvador) for the same products as those distributed in the PRODEA foodbaskets. For each capital, we calculated the total expenditure by individuals in their hypothetical attempt to obtain the same calories as in the products provided by the PRODEA foodbasket.

In these three state capitals, it is obvious that the retail market offers prices similar to the cost of the same calories through PRODEA. In Belo Horizonte, where we found the greatest differential as compared to the PRODEA foodbasket, the retail price of these food commodities was R\$1.68 more, while in Curitiba one can purchase the same calories as in the PRODEA foodbasket for R\$1.08 less on the local retail market. The difference in the large-scale retail market in Bahia was virtually negligible.

Table 17. Price of PRODEA foodbasket at retail markets in selected Brazilian areas.

	Quantity	Curitiba	Belo Horizonte	Salvador
Rice	10kg	R\$8.30	R\$9.20	R\$9.50
Beans	5kg	R\$3.25	R\$3.95	R\$3.40
Macaroni	2kg	R\$3.12	R\$3.24	R\$3.16
Manioc flour	5kg	R\$3.00	R\$4.10	R\$2.95
Corn flakes	3kg	R\$1.23	R\$1.17	R\$1.20
Total	25kg	R\$18.90	R\$21.66	R\$20.21
Differential PRODEA foodbasket.		-R\$1.08	R\$1.68	R\$0.23

Sources: Curitiba - Disque Economia / SMAB.

Belo Horizonte - Departamento de Acompanhamento/SMAB.

Salvador - EBAL/People's Foodbasket.

(1) Mean prices from September 1996 to September 1997, adjusted to September 1997

Table prepared by Lavinias and staff, IPEA, 1999.

There is thus an evident advantage to the direct monetary stipend, since it would allow families to acquire the same food without generating inefficiencies in the programme's administration. The stipend further allows individuals and families to prioritize and exercise free choice in supplying their food needs, which would certainly increase their welfare and decrease their food costs, since it would be possible to optimize the use of resources by identifying foodstuffs on sale or with seasonal price drops.

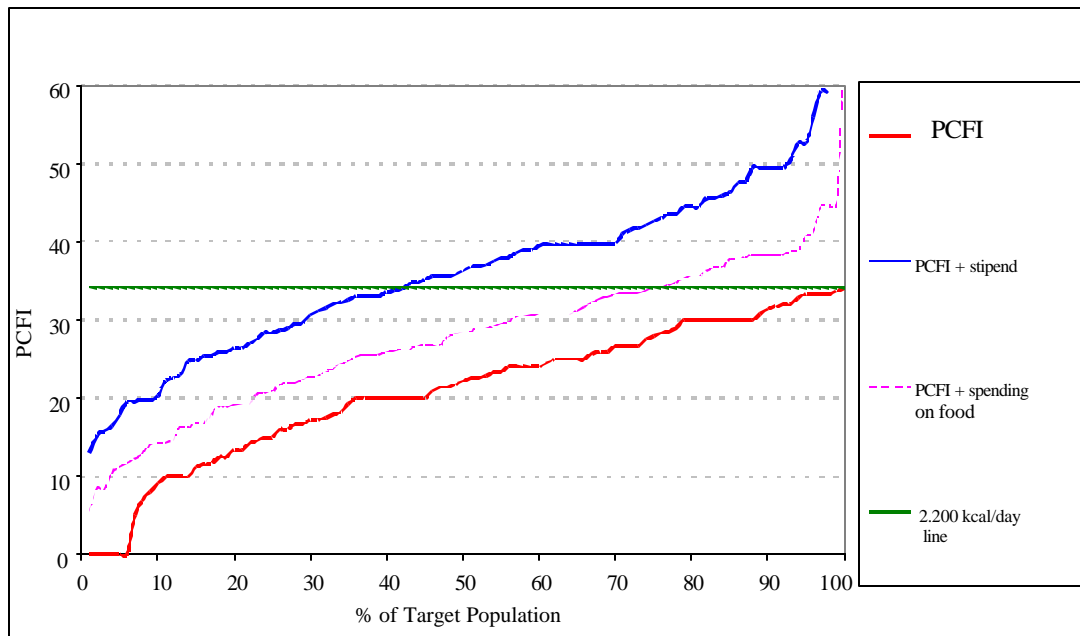
However, we are aware that upon transferring income to a family or individual without placing constraints on its allocation, the benefit may not be fully committed to meeting food needs (although we have assumed otherwise thus far for methodological reasons), since there are other immediate needs to be met, especially among poor families. The question thus arises as to what percentage of income families suffering food deficiency normally allocate to food. According to the 1996 Family Budget

Survey<sup>26</sup> for the Greater Salvador Metropolitan Area, families under the minimum calorie intake (2200 kcal/day) spend some 43 per cent of their income on food.

In order to measure the real income shift for target families in a hunger eradication programme, we assumed an income transfer of some R\$78.00 and factored in 43 per cent of this transfer, for the reasons given above.

Graphs 4a and 4b shows, for rural and urban areas in Bahia State,<sup>27</sup> the per capita family income distribution (lower curve), the income distribution plus the benefit provided to the families referring to 75 per cent of the 2200 kcal/day, or some R\$78.00<sup>28</sup> per family (top curve) - and the per capita family income plus the amount that would be spent on food assuming that people commit only 43 per cent of their income to food (dotted curve).

Graph 4a. Distribution of the poorest 35 per cent of the urban population of the State of Bahai by per capita family income (PCFI), and per capita stipend expenditure on food

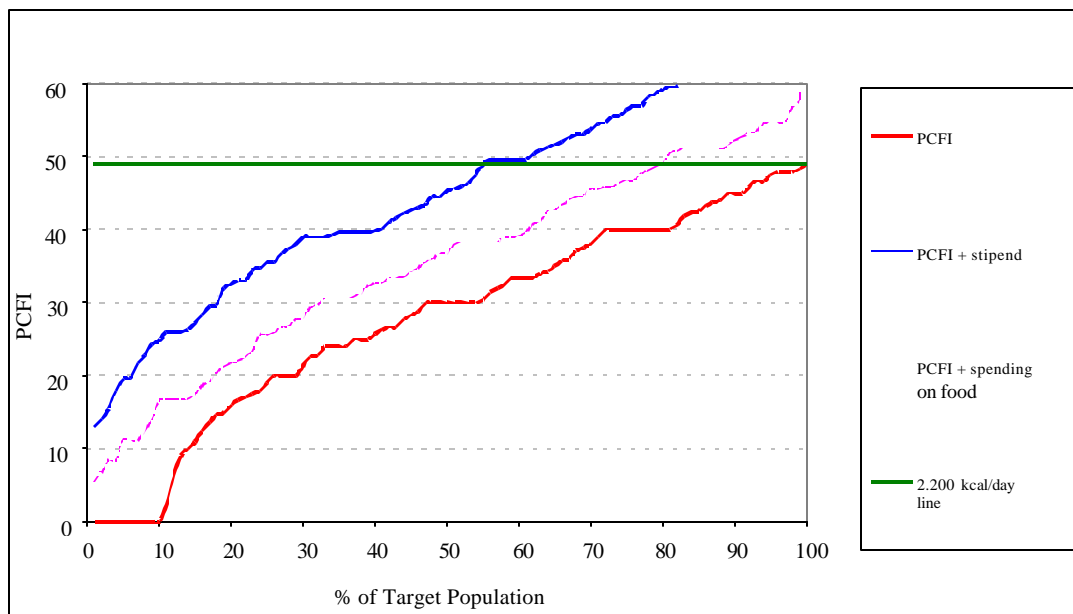


<sup>26</sup> Observing the household budget for families with monthly family income up to twice the official minimum wage for Greater Salvador Metropolitan Area according to the POF/96, we note that they spend 39.4 per cent on food, 22.4 per cent on housing, 10.1 per cent on transportation, 5.7 per cent on clothing, 5.3 per cent on health care, 1.6 per cent on education, and 15.5 per cent on other items.

<sup>27</sup> Note that the State of Bahia has 4,269,278 inhabitants living below the 2200kcal/day line. The figure is 35 per cent of the State's overall population, or 43 per cent in rural areas and 57 per cent in urban areas.

<sup>28</sup> Note that we opted for the same benefit for the entire State, to avoid encouraging people to move from one county to another.

Graph 4b. Distribution of the poorest 100 per cent of the rural population of the State of Bahai by per capita family income (PCFI), and per capita stipend expenditure on food



Note that the impact of the benefit in reducing food deficiency differs between urban and rural areas. In the cities, the reduction in the percentage of people with food deficiency (dotted curve) would be some 20 per cent, while in the rural areas the reduction would be approximately 25 per cent.<sup>29</sup> However, the full income transfer (a benefit of R\$78.00 - blue line) would elevate some 60 per cent of the rural population in Bahia out of poverty, in addition to 42 per cent of those living in cities. This confirms that the multiple use of this benefit would in fact be satisfying a broader set of unmet needs for these families and for this very reason would greatly increase the welfare of the neediest segment of the State's population.

## 7. Conclusion

Distribution of food commodities by PRODEA failed to compensate fully for food deficiency, by providing only 550 kcal/day on average. The final cost of the PRODEA foodbasket showed inefficiencies from an economic standpoint, given that if the same amount of income was transferred in full to these families, they would be able to acquire more calories (due to price differentials between PRODEA and the retail market).

Besides, a cash transfer would strengthen individual autonomy and enhance citizenship rights, weakening thereby the traditional paternalistic relationship between the state and citizens. Finally, the programme's coverage was far from complete.

If all these observations were not sufficient to underscore the inadequate profile of a food distribution programme for the poor, there is one further argument. Programmes like this fail to overcome their emergency/relief dimension, i.e., to break with their

<sup>29</sup> The 2,200kcal/day line is about 30% lower in urban areas.

marginal effect and to act in a broader sense through distribution of assets, that is efficiently promoting equity. Such aspects oriented the first part of this study, in which we attempted to emphasize the changes underway in the understanding of the role of compensatory policies in times of growing vulnerability and instability. To grant an income benefit rather than food is a less costly and more effective way to apply compensatory social policies in order for them to act efficiently, not only in the short-term fight against poverty, but also against inequality, ultimately the main cause of destitution in Brazil. To redistribute income in decent amounts, consistent with tackling the extremely precarious conditions in which a major portion of the Brazilian people live, is the best and quickest way to achieve a true social reform based on reducing the country's gross inequality. This means recognizing the central role of policies for directly transferring income to needy families in achieving this goal. It means adding something more to solidarity than merely one isolated measure. It expands the notion of citizenship, meaning that no strings can be attached for beneficiaries beyond their normal legal responsibilities.<sup>30</sup> To transfer income does not mean that Brazil is fated to create a "workfare" system, which would lead her back to the ideology prevailing in the early 20th century, viewing the poor as being resistant to the work ethic, loafers to be blamed for their own poverty.

Solidarity is unconditional. And the poor of Brazil, who have generally been excluded from their rights to social benefits (most of which target workers, especially those from the formal sector) expect the renewal of the Brazilian social protection system to finally achieve principles of equity, from the point of view both of policy design and strengthening institutions. Without this prerequisite, the commitment to eradicate hunger will remain a dead letter.

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<sup>30</sup> For example, the requirement that all the children finish primary school.

## References

- Abranches, S. 1992. "Política Social e Combate à Pobreza. A teoria da Prática", in *Política Social e Combate à Pobreza*, Rio de Janeiro, Paz e Terra.
- Ackerman, B and Alstott, A. 1999. *The Stakeholder Society* (New Haven and London, Yale University Press).
- Bowles, S and Gintis, H. 1998. "Efficient Redistribution: new rules for markets, States and communities" in Wright, E. (ed). *Recasting Egalitarianism* (London and New York).
- dos Santos, Wanderley G. 1987. in Zahar, J. (ed). *A Trágica Condição da Política Social, Política Social e Combate à Pobreza* (Rio de Janeiro) p. 37.
- Fraker, T. 1990. *The Effects of Food Stamps on Food Consumption: a review of the literature* (Alexandria, US Dep. of Agriculture, Food, and Nutrition Service).
- Fraker, M. and Ohls, J.C. 1995. "The Effect of Food Stamp Cashout on Food Expenditures: an assessment of the findings from four demonstrations", in *Journal of Human Resources* 30(4) pp. 633-649.
- Gilbert, N. 1995. *Welfare Justice: Restoring Social Equity* (New Haven and London Yale University Press, p. 66).
- Lavinas, L and Varsano, R. 1997. *Renda Mínima: integrar e universalizar*, in *Novos Estudos* (CEBRAP, 49, November).
- Lavinas, L. 1998 (forthcoming). *Projeto Segurança Alimentar e Descentralização: os novos rumos das políticas públicas* (IPEA. IPEA/FINEP/CEDEPLAR), Ch. III.
- Ohls, J. C and Beebout, H. 1993. *The Food Stamps Program - Design, Tradeoffs, Policy, and Impacts* (Washington, Mathematics Policy Research Institute, The Urban Institute Press).
- Rocha, S. 2000. *Opções metodológicas para a estimacão de linhas de Indigência e de Pobreza no Brasil* (Rio de Janeiro, IPEA).
- Rossi, P. 1998. *Feeding the Poor - Assessing Federal Food Aid* (Washington, The AEI Press).
- Valladares, L. 1999. Programas Sociales para los Pobres en Brasil, in *Políticas Sociales para Los Pobres en America Latina* (Buenos Aires, Schteingart, M.) pp. 159-197.
- Van Parijs, P. 1991. *Qu'est-ce qu'une société juste?* (Paris: Editions du Seuil, ch. 10).
- (1995). 'Más allá de la solidaridad. Los fundamentos éticos del Estado de Bienestar y de su superación' in R. Lo Vuolo (comp.) *Contra la Exclusión. La Propuesta del Ingreso Ciudadano* (Buenos Aires, CIEPP, Miño y Dávila editores) pp. 55-82.



