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TARGETING POVERTY THROUGH COMMUNITY-BASED PUBLIC WORKS PROGRAMS: A CROSS-DISCIPLINARY ASSESSMENT OF RECENT EXPERIENCE IN SOUTH AFRICA

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ABSTRACT

Since the transition to democracy, South African public works programs are to involve community participation, and be targeted to the poor and women. This paper examines the targeting performance of seven programs in Western Cape Province, and analyzes the role of government, community-based organizations, trade unions, and the private sector in explaining targeting outcomes. These programs were not well-targeted geographically in terms of poverty, unemployment, or infrastructure. Within localities, jobs went to the poor and unemployed, though not always the poorest. They did well in reaching women, despite local gender bias. Targeting guidelines of the state are mediated by diverse priorities that emerge in programs with multiple objectives, local perceptions of need and entitlement, and competing voices within civil society.

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1. INTRODUCTION

Unemployment stands out among the persistent development problems that have beset the South African government since the transition to democracy in 1994. According to official statistics, 30 percent of working age South Africans are unemployed (Klasen 1997).[1] For individuals in the poorest 20 percent of households, the unemployment rate is 53 percent. In 1993, 9,000 households nationwide were asked, "What, in your opinion, could government do to most help this household improve its living conditions?" From a list of 18 items, the top selection was "jobs." Moreover, jobs, i.e., job creation, was the number one issue in all three regions: rural, urban, and metropolitan, as well as for the Western Cape Province (PSLSD 1994; Klasen 1997).

Since 1992, a wide variety of institutions have called on the state to play a direct role in tackling this unemployment problem through labor-intensive public works programs (NEF 1994a; NEF 1994b; RDP 1994; Urban Foundation 1994; COSATU 1996; Department of Finance 1996; Department of Labour 1996; Department of Labour 1998; May et al. 1998a; May et al. 1998b). In 1993, a team from the National Economic Forum (NEF), an initiative of trade unions and business created to formulate economic development strategies, drew up plans for a National Public Works Programme (NPWP), to be spearheaded by the new government in 1994. The mandate of this team was to establish guidelines for public works projects that were not envisioned just as temporary

[1] Unemployment is defined as all people not working who would like to work and are actively seeking work or have given up looking (Klasen 1997: 69).

"make-work" programs for short-term poverty relief, but rather as a part of the government's Reconstruction and Development Programme (RDP), which embraced *participatory* and *sustainabl*e development. The NPWP established the following set of objectives (NEF 1994a): (1) create, rehabilitate, and maintain physical assets that serve to meet the basic needs of poor communities and promote broader economic activity; (2) reduce unemployment through the creation of productive jobs; (3) educate and train those on the program as a means of economic empowerment; and (4) build the capacity of communities to manage their own affairs, strengthening local government and other community-based institutions, and generating sustainable economic development.

As part of the government's strategy to reduce poverty, the NPWP and other similar public works programs were to be targeted to the poor. Attempts to target antipoverty projects to poor areas and poor people often fail due to an absence of poverty data, weak administrative capacity, and loss of political support from middle- and upper-income groups (Haddad and Zeller 1997). Compared to many other developing countries, these are not strong considerations in South Africa. Poverty data are available, administrative capacity is relatively strong, and there was a strong political commitment to target resources. Moreover, work by Morris (2000), using 1993 national household survey data, has demonstrated the high rates of spatial clustering of welfare.

Given these conditions, which are seemingly favorable for targeting, this paper examines the poverty-targeting performance of these programs, but also takes into account a broader set of political economy considerations. Targeting in the context of high unemployment and backlogs in infrastructure, where need is greater than available

resources, means that although budgets may be most efficiently allocated in terms of reaching the poorest of the poor, choices are made as to who among the unemployed gets access to employment and which communities without certain physical assets get access to them. Within the context of the South African political economy, targeting has thus involved highly contested debates over the processes and criteria for making decisions about relative need and entitlement. It also has involved institutions in the process of redefinition and democratization, shaped by competing voices within government and civil society. In this sense, the South African case offers a rich experience in which to understand the complex and dynamic processes and outcomes related to targeting of poverty programs.

This paper examines poverty targeting in South Africa's Western Cape Province using mixed-method research, both quantitative and qualitative, and economic and sociological perspectives. The economic approach focuses on performance, asking (1) how well the projects are targeted between and within districts, and (2) how well the projects target the poorest people within communities. Specifically, the economic analysis answers the following questions: Do poorer districts capture their share of projects? Are the projects targeted strictly to the districts with most unemployment? Are projects located where there is the greatest infrastructure needs? In which districts do the

projects make the biggest dent in overall unemployment? Within districts, do the "poorest of the poor" participate in these projects?[2]

The sociological approach focuses on the processes of project location and worker selection, examining how and why projects were located as they were, how and why workers were selected as they were, and the implications of South African social and political configurations for the functioning of a self-targeting mechanism. How have the historic and current roles of trade unions, community-based organizations, and the private sector in relation to the apartheid state and the new democratic state ultimately shaped program objectives and outcomes? What are the poverty, gender, democratic, and cost implications of community-controlled targeting processes? Our study finds some degree of tension between targeting criteria based on certain statistical measures of poverty, and the diverse local priorities that emerge in these programs with multiple and sometimes competing objectives.

The international literature on public works programs (Subbarao et al. 1997; Subbarao 1997; Deolalikar 1995; von Braun, Teklu, and Webb 1992; van der Walle and Nead 1995) makes it clear that the multiple objectives of the South African public works programs are without precedent elsewhere in the world. As will be shown, these multiple objectives complicate the more standard evaluation of targeting in public works programs. For example, projects that do well in one targeting dimension, such as poverty,

[2] Three national evaluations of South African public works programs carried out in 1996 and 1997 also looked at targeting, but included only two programs, the Community-Based Public Works Programme and the Community Employment Programme. They also focused on within-district and community targeting, not on resource allocations between districts (CASE/ILO 1997; CASE/ILO 1996; ILO 1997). In general, these studies find little evidence that the neediest within communities are being targeted.

may do poorly in others, such as infrastructure need or community capacity building. In addition, targeting guidelines drawn up by the state at a centralized level are mediated by community-based decisionmaking practices and local perceptions of need and entitlement.

Section 2 provides a brief overview of poverty and unemployment in South Africa and the Western Cape Province. Section 3 examines the economic and political context in which the public works programs were developed, taking into account the role of trade unions, community-based organizations, and the private sector in the period before and during the transition to democracy, in order to understand their role in public works programs. Section 4 describes the seven programs and 101 projects studied in the Western Cape Province, outlining the data collected and the research methods used in the analysis. Section 5 examines formal and informal processes of project location in the Western Cape, considering institutional and political factors, the criteria and processes used, and the implications for targeting outcomes. Section 6 examines the between-district targeting performance from an economic perspective, answering the question of how well the allocation of project resources match poverty unemployment and infrastructure stocks.[3] Section 7 explores the targeting of projects within districts by comparing project wages to comparable district-level wages. Section 7 takes an economic perspective that looks at wage rates as a means of determining whether the poorest of the poor were targeted and considers the question of wage rates in the context of the South

[3] There are 42 magisterial districts (MDs) in the Western Cape Province.

African political economy. Section 8 looks within communities to study the process of individual targeting—who got jobs in the projects? Here we draw heavily on case studies to examine community mechanisms for selecting workers, the processes and criteria used, and discuss the implications for poverty targeting, participatory democracy, and the targeting of women. Section 9 presents conclusions and policy implications**.**

2. POVERTY AND UNEMPLOYMENT IN SOUTH AFRICA AND THE WESTERN CAPE PROVINCE

In most developing countries, unemployment and poverty go hand in hand, and South Africa is no exception—this is clear from the work of Wilson and Ramphele (1989), Moller and Jackson (1997), and May et al. (1998a, 1998b). A number of estimates of the percentage of South Africans in poverty exist. They range from 23.7 to 56.7 percent, depending on the poverty line used (Klasen 1997). The South African Poverty and Inequality Report (PIR) (May et al. 1998a), uses the 1995 National Income and Expenditure Survey to derive a poverty rate of 49.9 percent. Based on the same data and poverty line, the PIR reports that 61 percent of Africans, 38.2 percent of Coloreds, 5.4 percent of Indians, and 1 percent of Whites are poor.[4]

In terms of unemployment rates, Klasen and Woolard (1999) undertake perhaps the most systematic comparison of the estimates from the various nationally representative micro-datasets that emerged in the mid 1990s (PSLSD 1994; CSS 1998).

[4] The old apartheid classifications are used here as they have continued to be used formally to monitor socioeconomic status among previously disadvantaged groups.

Their comparisons yield a range of national estimates of the narrow definition of unemployment of 12.7 percent to 20.2 percent and a broad definition range of 28.5 to 32.1 percent. For the Western Cape, the corresponding ranges are from 12.3 to 13.5 percent (narrow) and from 16.4 to 18.5 percent (broad). In all provinces, Africans are the most likely to be unemployed. It is this racial patterning of poverty and unemployment that distinguishes South Africa from other developing countries, a legacy of apartheid racial segregation and discrimination with respect to political rights, land distribution, residential patterns, education, employment opportunities, and access to basic services.[5] This racial pattern of poverty and unemployment, and the high absolute as well as relative levels of both, created an urgency for the post-apartheid government to focus on poverty alleviation and job creation programs.

3. MULTISECTORAL FORUMS, PARTICIPATORY DEVELOPMENT, AND THE RISE OF COMMUNITY-BASED PUBLIC WORKS PROGRAMS IN SOUTH AFRICA

Community-based public works programs, their multiple objectives and the issues and dilemmas they present for targeting, can be understood in terms of South Africa's political history, including the struggle against apartheid and the particular configuration of political forces that shaped the transition to democracy and the platform of the first ANC government. The National Public Works Programme (NPWP) was the brainchild of the National Economic Forum (NEF), a policy advisory body formed in 1992 by business

[5] This history has been well-documented (see Davenport 1991; Thompson 1990).

and labor, which later became a multisectoral forum of government and institutions of civil society. The private sector played a prominent role in economic policymaking during the apartheid era, and during the transition it forged a number of relationships with trade unions to formulate post-apartheid economic policy. Trade unions acquired this prominent voice through the NEF and other policymaking forums because of the activist and intellectual roles they had played in the movements against apartheid and for workers rights. For over 70 years, black trade unions have influenced economic and political conditions for black South Africans (Baskin 1991; Hirson 1989; Friedman 1987).[6] Leading up to the transition to democracy, the largest federation, the Congress of South African Trade Unions (COSATU), joined an alliance with the ANC, hoping to play a role in shaping the future economic stage.

The role of community-based organizations (CBOs) in public works programs also has its roots in the apartheid period, where civic associations, student, youth, religious, and women's groups, among others in black communities, engaged in both resistance to the government and the organization of alternative services in the townships. In the mid-1980s this movement coalesced as the United Democratic Front (UDF), later into the Mass Democratic Movement, and eventually many formed the South African National Civics Organisation (SANCO). SANCO joined the ANC-COSATU alliance in the lead-up to the democratic transition. Participatory democracy was one of the

[6] This role accelerated in the 1970s with the birth of the modern trade union movement in 1973 and the legal status given unions in 1979. Over the years the main trade union federations took different positions on the relative importance of political and economic struggles, but collectively they were engaged in both.

ideological strands of both COSATU and the UDF, and many of their affiliates practiced such democracy in their internal organization and envisioned it as the future order (Lodge 1991; Seekings 1988; Price 1991). The ANC alliance's proposed development policy, the Reconstruction and Development Programme (RDP), called for participatory decisionmaking in development programs, stating

> The empowerment of institutions of civil society is a fundamental aim of the Government's approach to building national consensus. To facilitate effective involvement, the Government will introduce programs that will enhance the capacity of community-based organisations (RDP 1994: 41).

The NPWP, as part of the RDP, reflected this vision in its design. In particular, the Community-Based Public Works Programme (CBPWP), in addition to job creation, required community participation in project management and incorporated additional priorities of the trade unions and CBOs: job training and the building of needed assets for the poor. The national Department of Public Works stated in its technical documents that in the CBPWP, the

> community should control all processes leading to the ultimate establishment of the asset. . . This means that the community, through its representative community structure, should make the decisions about what should be constructed, how it should be designed and constructed, who should work on the project, as well as the rates and system of employment (DPW 1996: 38).

In 1993, two major interrelated initiatives brought trade unions and CBOs into the sphere of public works policymaking. One was the NEF's job creation commission, which allocated funds for job creation projects that met certain criteria related to labor intensity, job training, and community participation. These criteria also featured, in the second initiative, the Framework Agreement for Public Works Projects Using Labour-Intensive Construction, signed by COSATU, SANCO, and a coalition of five major engineering associations (SAIRR 1993/4). This agreement stipulated that projects that met specified criteria would be exempt from union-negotiated wage requirements that bind formal-sector construction employment. Significantly, COSATU and SANCO thus accepted the principles of targeting the poor through lower wages, provided workers and their communities were receiving compensatory benefits in the form of needed infrastructure and job training.

The involvement of unions and CBOs in program design and project management has significant implications for targeting. First, participatory multisectoral forums were responsible in many cases for locating projects, and the different actors involved—including those in the private sector—had a variety of interests in where projects were located, not always corresponding with the highest levels of poverty. Second, with respect to CBO involvement in worker selection, community priorities and definitions of poverty may or may not correspond with the externally-defined common criteria for poverty targeting. Third, the unions and CBOs disagreed on the appropriateness of putting people in the position of hiring and firing workers from their own communities. Finally, tensions arose between the commitment of unions to higher wages for workers,

and the principle of at- or below-market wages for poverty self-targeting. These issues are explored in detail later in this article as we examine the process of community and worker targeting in the Western Cape.

4. RESEARCH METHODS AND DATA

SELECTION OF THE PUBLIC WORKS PROGRAMS

There are more than seven public works programs in the Western Cape Province, but only seven have been initiated since 1993 with the full set of objectives that mirror those of the NPWP (see Section 1). The seven programs that met these criteria, containing 101 projects, are profiled in Table 1. Together, these projects represent a census of all labor-intensive public works projects initiated and completed in the Western Cape Province between 1995 and1997.

DATA COLLECTION METHODS

A number of data collection methods were used to gather information about the public works projects, their stakeholders, and the districts where the projects are located.

Quantitative-Level Data on All 101 Projects

Using project documents, and mail-in questionnaires with follow-up telephone calls and personal interviews, quantitative and qualitative data were collected for each

Table 1. Public works programs in Western Cape Province included in the study

Name of program	Administering institution	Number of projects	Rural/ urban	Types of infrastructure and number of projects of each type
Clean and Green (CAG)	Provincial Department of Transport and Public Works (DTPW)	10	All urban	Cleaning (2), Greening, Alien vegetation clearing (7), parking area (1)
Community-Based Public Works (CBPWP)	DTPW	18	6 rural	Community Centre (4), Roads (2), Stormwater drainage (1), Sanitation (6), Water supply (5)
Community Employment Programme (CBPWP/CEP)	Department of Public Works (DPW, national) and the Independent Development Trust (IDT)	22	6 rural	Community Centre (7), Roads (1), Stormwater drainage (1), Sanitation (4), School (1), Crèche (5), Clinic (1), Greening (1), Roads & Stormwater (1)
Fynbos Water Conservation Project (FWCP) also known as the *Fynbos Working for Water Project (WWP)*	Department of Water Affairs and Forestry (DWAF)	14	All urban	Alien vegetation clearing (14)
Pilot Projects (Pilot)	DPW/DTPW	2	All urban	Roads & Stormwater (2)
Transport Projects (Trans)	DTPW	6	1 rural	Roads (3), Roads & Stormwater (3)
National Economic Forum/Western Cape Economic Development Forum (WCEDF/NEF)	WCEDF/DBSA	29	3 rural	Community Centre (11), Roads (1), Stormwater drainage (2), Sanitation (1), Water supply (1), Cleanup (3), Recreation grounds (1), Roads & Stormwater (4), Multiple services (4), Bridge (1)

Source: Adato et al. 1999.

project in terms of location, type of asset created, cost structure, duration, employment days generated, wage rates offered, type of implementing arrangement, and other aspects (Adato et al. 1999).[7]

[7] In total, over 40 variables were collected for each project.

The data were collected in the following manner. Initially, official documents were reviewed for each of the seven programs (monthly reports, final project close out reports, project review summaries, etc.). However, in many cases it was determined that these documents either (1) contained data taken from project *applications* and did not reflect actual data collected during project implementation, or (2) were incomplete or contained data that were of questionable origin or contradictory. Thus, in order to get accurate data, a project-level questionnaire was designed and administered to implementing agents, and sometimes contractors and accountants, for each project, and additional project records reviewed.

District-Level Data

The project-level data were merged at the district level with district-level averages from the 1995 October Household Surveys (CSS 1998) conducted by the government's Central Statistics Service. District population figures from the 1996 Census (SSA 1999) were combined with the 1995 OHS data to construct district-level variables such as average income per capita, the standard deviation of per-capita income, the headcount poverty rate, the unemployment rate, the wage rates of unskilled manual labor, a rank of infrastructure access, and the percentage of individuals with at least a standard 10 education.

Average income per capita is simply the district mean from the 1995 October Household Survey's Income and Expenditure Survey. The standard deviation of per-capita income is the standard error within the district. The poverty rates, P_0 and P_2, are

calculated by comparing per-capita household income to a poverty line that is identical in every district in the province. P_0 is the headcount index of poverty and P_2 is the income gap squared poverty index, the latter being sensitive to the severity of poverty**.** The unemployment rate was estimated from the 1995 OHS data as all those who had not worked in the 7 days prior to the survey, did not have their own business, and would accept a suitable job if offered, whether or not they were still looking for work. The daily wage rate was derived from Section 3 in the 1995 OHS questionnaire for occupations that were similar to those recorded in the public works projects. The percentage of individuals with at least a standard 10 education (equivalent to graduation from high school) was taken from the OHS 1995 data. The number of unemployment days per year per district is estimated by multiplying the unemployment rate from the OHS 1995 by the population of individuals in each district over 11. The latter number was derived from multiplying the 1996 census population by the percentage of individuals over age 11 from OHS 1995 data. The number of unemployed individuals is then multiplied by 250 days (50 weeks*5 days). Over 94 percent of those unemployed reported no paid work in the previous year (CSS 1998). This percentage did not vary much by district, and we decided to be conservative in our estimate of the annual duration of unemployment, and hence use 250 days.

Finally, two infrastructure scores are constructed. The first is constructed by ranking the districts with 10 variables from the OHS 1995 data and then summing the ranks, with a high score representing bad infrastructure. The second is a more

parsimonious specification of the index, using a subset of four of the 10 variables. The first index is constructed based on district means of

- rooms per capita,
- number of households sharing a toilet,
- percentage of the district that walk more than 100 meters to a water source,
- percentage of households without electricity,
- percentage of households with no access to a telephone
- percentage of households that are more than 5 kilometers to the nearest medical facility,
- percentage of households that have to travel more than one hour to the nearest medical facility,
- percentage of households that are more than 5 kilometers from a welfare point,
- percentage of households with running water indoors,
- percentage of households that record adequate water sources.

The second infrastructure score uses only the variables relating to electricity access, the distance to water source, and the time and distance to the nearest medical facility. Both infrastructure scores are presented in Section 6.

Project Case Studies

In addition to the database for the 101 projects, qualitative case studies were conducted for 8 of the 101 projects. The projects were selected purposively to represent a range of characteristics, including type of infrastructure or activity; rural and urban location; geographical spread; formal roles of local government, CBOs, NGOs, and consultants; employment of women; existence of subcontractors; types of payment systems, and interest generated among policymakers.

Stakeholders whom we interviewed were identified as the following: workers, community-based project steering committee (PSC) representatives,[8] CBO representatives; local government councilors, municipality officials and staff; consulting engineers and architects, contractors, subcontractors, worker committees, and supervisors. Not all projects had the same role-players. At the program level, stakeholders interviewed were national and provincial government officials, including policymakers and program managers at many levels, consultants, community facilitators, trade union officials, and policy advisors. In total, we conducted over 100 in-depth, semi-structured interviews.

In selecting the former project workers to participate in the PRA/focus group workshops, we invited all workers in the three projects that had fewer than 30 workers in total. In the five projects with more than 100 workers, we used a stratified random sample from a list of all project workers, proportional to the number of men and women workers.

[8] In most cases, PSC members were elected by the community, though in a significant minority of cases, they were not.

Approximately 30–50 workers attended each workshop, depending on the size of the project.

5. THE PROCESS OF PROJECT LOCATION IN WESTERN CAPE PROVINCE

Before examining the results of our economic analysis of the performance of poverty targeting in Western Cape Province, it is important to understand the processes by which communities were chosen to receive projects, and the institutional context within which these processes took shape. Public works programs in the province are inserted into a set of institutions at provincial, regional, and local levels—all undergoing a process of change, yet built upon inherited structures.

Since 1948, the province was dominated by the National Party in all districts except the Cape Town metropole. Colored South Africans were given various forms of limited representation from the 1960s through the 1980s, leading to some improvements in their material conditions, leaving the African population behind. In the 1994 elections, Western Cape Province was the only province in the country to remain under National Party control, with 55 percent of the provincial legislature compared to the ANC's 33 percent (SAIRR 1995). The ANC was allocated 4 of the 11 seats on the provincial executive council, including the Ministry of Transport and Public Works, whose minister had a strong commitment to labor-intensive public works programs. The province has a history of strong UDF and trade union activism, and the Western Cape Economic Development Forum (WCEDF, the provincial-level multisectoral body responsible for

implementing the NEF's first public works initiative) was well organized, funding 29 projects in 1993. Some of these WCEDF members later sat on the funding committee of the CBPWP. The post-1994 provincial Department of Transport and Public Works (DTPW) was under the control of officials of the previous government department, who viewed with less enthusiasm these new public works programs with multiple objectives. The minister, however, in addition to representing the ANC that had designed the programs at the national level, was a former WCEDF member and trade union official and pushed for an institutional framework within which to implement them. The CBPWP and CAG programs, like the WCEDF program that preceded it, had representatives from government, the private sector, trade unions, and CBOs involved with project selection. Applications were solicited using formal and informal networks of contacts between government officials at provincial and local levels, between government officials and consultants, and between NGOs, CBOs, and other sectoral interest groups. For the CEP, selection was made by the administering institution, the Independent Development Trust (IDT).

The government had a mandate to target poor communities in need of employment and infrastructure, but depending on one's perspective, all black communities could fit this profile (the projects were limited to African and Colored communities). The concept of *relative* need was not well developed. As one of the leading trade union participants in the WCEDF recalled, "unfortunately, we didn't have that type of backdrop" (personal interview with Adrian Sayers).

Each of the seven programs had its own criteria for project location: the WWP used primarily ecological criteria; the Transport and Pilot projects selected based on a backlog of needed roads and drainage in areas that served poor communities; and project selection in the WCEDF, CBPWP, CAG, and CEP was based on how well the proposed project fit the multiple objectives of the program. For example, the CBPWP ranked project applications according to labor intensity, training, community participation, budget factors including percentage costs going to communities and the private sector, management and maintenance, and ability of the applicant to implement the project.[9] This is one of the influences of the trade unions and CBOs, which had been instrumental in establishing these multiple criteria.

These qualities did not necessarily mean the communities selected were the poorest. Similarly, they would have substantial unemployment but not necessarily the highest unemployment (these measures are analyzed in the next section). Only the CEP mentions in its documents that poverty criteria should be used, though it is not known to what extent it was used. Furthermore, with a few exceptions, no locality received funding for more than one project within one program, but programs did not pay attention to what other development project funding the locality received—either from other public works programs or elsewhere.

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[9] The criteria used for project selection were identified through our personal interviews with individuals who participated in these processes of project selection, and the internal records and ranking documents of the programs.

Importantly, how well the projects met the program criteria could only be judged through what was written on the project applications. This meant that the quality of the applications, and the ability of the authors to understand what the funders were looking for and tailor the projects (or applications) to these criteria, had a strong effect on whether the project would get funding. This points to communities with well-organized CBOs, active local governments, or active consultant engineers in the area, creating a contradiction. These communities were not necessarily the poorest nor the most in need of the community capacity building that was one of the program objectives.

With respect to consultant engineers, it became clear that they play a large role in accessing public works funds for a particular locality. In the Western Cape, large-scale, white-owned consulting engineer and construction firms have long-standing relationships with provincial and local government officials and, as they are in contact with them about conventional contracts, they hear about RDP funding opportunities. The DTPW was also under pressure to allocate public works funds and carry out successful projects, gravitating them toward the private sector consultants in whom they have confidence. In some communities, local or regional government engineers played this role rather than the private sector. The potential for the power of the strong application to distort efforts to allocate public works funds to localities that most need them is significant. It also interfered with the community capacity-building objective, as active technical experts usually ended up managing the projects, as well as the additional program objective that

encourages the use of smaller black contractors.[10] Engineering consultants inform communities about the availability of funds, assist in the preparation of project applications, and then almost inevitably are contracted to design the infrastructure. The following quotation from a consulting engineer in the Murraysburg water supply project explains the process:

> What we do in the past, engineers, professional firms like us, used to sit back and wait for the government to appoint us. That was the way we got jobs in the past and we were on a panel and someone took out our name for a big job and we got it like that. But now the new system is that we can go out in the field, we can advertise, we can go speak and sell ourselves you see. What we do is like now in the Karoo: when we first started here it was about 1993, we visited all the small towns and we said, well you know the new funding is going to work like this, you've got to apply. It's not going to work like: a small town you've got so many inhabitants you get so much, it depends on what you need. You've got to apply and the more you apply for and the quicker you apply, the more you'll get (personal interview, consulting engineer, Murraysburg project).

Although consultants do work in poor communities and have helped these communities access funds for needed infrastructure, their involvement hinders efforts by smaller enterprises to compete. Moreover, the very existence of consultants in the

[10] Adato et al. (1999) contains a chapter on community participation in public works projects, revealing the extent to which the involvement of consultants undermines community involvement in technical aspects of project management, relegating CBOs mainly to the role of community liaison.

particular area implies that it is unlikely to be the poorest of poor areas—in addition to the pre-existing advantages that have attracted the engineers to these areas in the first place; they are likely to have built infrastructure in those areas at an earlier date.

Thus the loosely defined criteria of need, the commitment of the unions and CBOs to the requirement of community participation, training, and labor-intensity, and the influence of consultants and local government engineers all had the potential to affect poverty targeting in a variety of ways. The results of these project selection processes in the seven programs studied are presented in the following sections.

6. TARGETING BETWEEN DISTRICTS

This section describes the between-district targeting of projects by combining project-level information with district-level data from the 1995 October Household Surveys (CSS 1998).

Table 2 lists the 42 magisterial districts in the Western Cape Province and ranks them in terms of headcount poverty rates from highest to lowest. The districts vary greatly in population (from 728,000 to 10,000), average per-capita income levels (390 to 3,183), poverty rate (54 to 3 percent), unemployment rate (1.3 to 23.5 percent), and high school graduation rates (12.5 to 53.9 percent). Since the infrastructure scores are sums of ranks, they only capture orderings of districts. If these indicators move together, the multiple objectives of the public works projects may not prove to be problematic in terms of targeting goals.

Table 2. District profiles

District name	Number of projects	Population (1996 census)	Per capita income	CV of income	Head-count poverty rate	Unem-ployment rate	Unemployment days	Infra-structure score 1	Infra-structure score 2	Percent with at least standard 10 education
Robertson	4	34,566	390	26.4	0.54	8.4	622,719	196	52	16.6
Oudtshoom	1	78,704	808	26.8	0.45	16.1	2,841,892	296	109	15.9
Murraysburg	1	5,998	1,146	30.6	0.45	14.3	185,091	304	106	13.2
Heidelberg	2	12,295	415	33.9	0.44	5.6	149,053	239	95	19.3
Beaufort-West	0	343,694	552	15.3	0.43	14.7	1,128,514	176	78	20.0
Morreesburg	0	13,886	940	15.3	0.39	15.0	466,085	232	52	26.9
Knysna	4	61,376	580	33.6	0.38	11.8	1,637,545	267	98	20.7
Montagu	2	23,359	812	21.4	0.37	9.7	497,950	235	88	25.5
Uniondale	1	9,563	259	19.0	0.36	12.5	266,269	281	128	12.5
Laingsburg	1	5,912	678	18.3	0.34	5.1	66,512	176	101	29.1
Prince Albert	6	9,508	823	15.3	0.32	6.6	132,923	307	144	32.3
Worcester	3	133,193	1,165	15.2	0.31	12.8	3,845,630	195	53	34.9
Caledon	7	80,210	391	33.8	0.30	6.4	1,116,456	198	66	17.3
Ladismith	0	13,612	1,933	46.0	0.28	12.4	385,304	205	130	32.0
Mitchells Pln	8	728,914	466	25.9	0.28	23.5	37,826,185	288	107	20.9
Vanrhynsdorp	1	14,062	527	15.6	0.27	11.4	355,070	246	113	14.4
George	6	113,227	1,041	17.7	0.25	10.8	2,671,191	266	87	29.7
Calitzdorp	1	7,578	1,022	23.0	0.23	11.7	189,857	201	95	29.6
Mosselbay	1	58,273	1,118	15.0	0.23	10.0	1,300,803	232	70	41.4
Ceres	0	51,188	776	15.4	0.23	12.4	1,363,507	277	133	23.4
Hermanus	4	30,092	1,555	28.4	0.21	8.1	552,146	187	97	39.1
Tulbagh	3	30,415	670	31.4	0.20	9.5	645,726	291	150	22.9
Malmesbury	2	120,910	1,193	18.8	0.19	15.0	3,985,387	153	58	34.1
Paarl	4	153,324	1,143	13.1	0.18	9.1	3,126,592	233	76	34.4
Riversdale	4	26,256	1,965	16.9	0.17	9.8	583,692	246	94	34.1
Vredendal	1	31,031	1,305	28.6	0.17	3.4	236,344	182	51	38.0
Bredasdorp	0	24,538	1,250	22.4	0.16	5.9	324,501	169	64	27.7
Swellendam	4	33,180	1,595	24.6	0.16	8.8	669,800	166	62	35.8
Kuilsriver	0	253,512	1,046	12.3	0.15	11.7	6,555,079	290	123	33.3
Stellenbosch	2	79,468	1,157	31.5	0.14	13.2	2,351,597	180	68	28.4
Piketburg	2	38,751	812	16.8	0.13	1.3	117,360	215	91	30.6
Strand	4	56,487	857	17.2	0.12	5.9	753.689	176	43	42.8
Somerset-W.	2	65,433	1,027	14.7	0.12	6.9	983.268	224	98	45.8
Goodwood	3	314,196	1,171	13.6	0.12	10.6	7,577,052	189	84	24.9
Wellington	0	45,225	2,306	18.3	0.12	6.8	703,062	135	32	42.9
Hopefield	0	10,110	1,385	20.8	0.11	0.8	19,365	147	58	27.8
Clanwilliam	4	28,799	1,169	12.4	0.11	6.0	405,407	203	102	35.2
Vredenburg	1	46,902	1,062	10.4	0.08	3.2	337,637	275	93	28.6
Simonstown	4	76,025	2,371	10.7	0.06	9.8	1,702,977	130	58	44.3
Bellville	3	274,081	2,855	15.7	0.06	7.9	5,005,205	126	65	45.9
Wynberg	4	543,322	2,141	13.6	0.05	9.7	12,077,808	100	44	53.9
Cape	1	184,700	3,183	9.5	0.03	5.8	2,465,623	202	98	53.3

Table 3 presents correlation coefficients for these variables and shows that district poverty rates are moderately correlated (at the 10 percent level) with district unemployment rates and district infrastructure score 1 (but not infrastructure score 2), and strongly correlated with educational attainment (at the 1 percent level). Note that the unemployment rate is not significantly correlated with either infrastructure score or with educational attainment. Thus, if projects are targeted closely to unemployment rates, they will not necessarily be targeted well with respect to infrastructure need and educational attainment. However, targeting by poverty rates is a useful way of targeting for multiple objectives: poverty and unemployment reduction, infrastructure development, and increased educational attainment.

These comparisons do not take into account the size of projects and the population of different districts. Table 4 compares the share of province-wide public

Table 3. Correlations of district characteristics

	MDPOP96	AVGINC	P0	UNEMPLOY	INFRASCRI	INFRASCR2	STD10
MDPOP96	1.00						
AVGINC	0.18	1.00					
P0	0.27	0.65**	1.00				
UNEMPLOY	0.42*	0.20	0.41*	1.00			
INFRASCR1	0.09	0.53**	0.46*	0.33	1.00		
INFRASCR2	0.09	0.31	0.23	0.20	0.76**	1.00	
STD10	0.23	0.77**	0.75**	0.34	0.56**	0.39	1.00

Notes: Number of cases = 42; 2-tailed Significance: * -0.01 ** - 0.001.

Key:
MDPOP96 - District population from 1996 census.
AVGINC - Mean per capita income, OHS 1995.
P0 - Poverty headcount rate, OHS 1995.
UNEMPLOY - Broad unemployment rate, OHS 1995.
INFRASCR1 - Infrastructure score 1 (10 variables), OHS 1995.
INFRASCR2 - Infrastructure score 2 (4 variables), OHS 1995.
STD10 - % of individuals completing standard 10, OHS 1995.

Table 4. Share of poverty, unemployment, infrastructure need, and public works expenditures within districts

District name	Percent population in MD	Percent poverty (P0) in MD	Percent poverty (P2) in MD	Percent unem-ployment days in MD	Percent infra-structure store (1) in MD	Percent infra-structure score (2) in MD	Percent PWP expenditures in MD	Percent PWP expenditures (training) in MD	Percent PWP expenditures (labor) in MD
Mitchells Plain	18.4	28.5	28.0	35.0	25.5	24.0	9.7	20.8	6.5
Worcester	3.4	5.8	5.8	3.6	3.2	2.2	1.3	0.8	4.7
Kuilsriver	6.4	5.5	5.1	6.1	8.9	9.6	0.0	0.0	0.0
Goodwood	7.9	5.2	5.1	7.0	7.2	8.1	1.3	0.7	1.2
Oudtshoom	2.0	5.1	5.3	2.6	2.8	2.6	1.6	1.4	2.6
Paarl	3.9	3.9	3.8	2.9	4.3	3.6	15.3	3.9	14.8
George	2.9	3.9	4.3	2.5	3.7	3.0	12.8	9.1	20.7
Wynberg	13.7	3.5	3.5	11.2	6.6	7.4	0.9	1.7	1.2
Caledon	2.0	3.4	3.2	1.0	1.9	1.6	5.4	5.7	15.9
Knysna	1.6	3.3	3.0	1.5	2.0	1.9	1.3	7.3	1.0
Malmesbury	3.1	3.3	3.6	3.7	2.2	2.2	0.4	0.6	0.2
Robertson	0.9	2.6	2.8	0.6	0.8	0.6	0.5	0.0	0.5
Bellville	6.9	2.4	2.5	4.6	4.2	5.5	33.6	21.2	8.0
Beaufort-West	0.9	2.1	2.0	1.0	0.7	0.8	0.0	0.0	0.0
Mosselbay	1.5	1.9	1.8	1.2	1.6	1.3	0.1	0.4	0.2
Ceres	1.3	1.6	2.0	1.3	1.7	2.1	0.0	0.0	0.0
Stellenbosch	2.0	1.6	1.9	2.2	1.7	1.7	2.5	1.5	4.7
Montagu	0.6	1.2	1.4	0.5	0.7	0.6	0.9	2.9	1.1
Somerset-West	1.7	1.1	1.1	0.9	1.8	2.0	0.9	0.8	3.4
Strand	1.4	0.9	0.9	0.7	1.2	0.7	0.5	2.5	0.5
Cape	4.7	0.9	0.7	2.3	4.5	5.6	0.2	0.4	0.4
Tulbagh	0.8	0.9	1.0	0.6	1.1	1.4	2.2	0.9	5.2
Hermanus	0.8	0.9	0.7	0.5	0.7	0.9	1.4	2.5	1.1
Heidelberg	0.3	0.8	0.7	0.1	0.4	0.4	0.3	2.0	0.3
Morreesburg	0.4	0.8	0.8	0.4	0.4	0.2	0.0	0.0	0.0
Vredendal	0.8	0.7	0.9	0.2	0.7	0.5	0.2	0.5	0.2
Wellington	1.1	0.7	0.8	0.6	0.7	0.4	0.0	0.0	0.0
Swellendam	0.8	0.7	0.8	0.6	0.7	0.6	1.8	3.3	0.9
Piketburg	1.0	0.7	0.7	0.1	1.0	1.1	0.4	1.1	0.3
Simonstown	1.9	0.7	0.7	1.6	1.2	1.4	0.3	0.3	0.7
Riversdale	0.7	0.6	0.6	0.5	0.8	0.8	0.6	2.0	0.7
Vredenburg	1.2	0.6	0.4	0.3	1.6	1.3	0.2	0.3	0.2
Ladismith	0.3	0.5	0.5	0.4	0.3	0.5	0.0	0.0	0.0
Bredasdorp	0.6	0.5	0.5	0.3	0.5	0.5	0.0	0.0	0.0
Vanrhynsdorp	0.4	0.5	0.5	0.3	0.4	0.5	0.2	0.0	0.3
Uniondale	0.2	0.5	0.5	0.2	0.3	0.4	0.0	0.0	0.0
Clanwilliam	0.7	0.4	0.4	0.4	0.7	0.9	1.3	2.0	1.3
Prince Albert	0.2	0.4	0.5	0.1	0.4	0.4	1.1	2.7	0.9
Murraysburg	0.2	0.4	0.5	0.2	0.2	0.2	0.5	0.0	0.3
Laingsburg	0.1	0.3	0.3	0.1	0.1	0.2	0.0	0.0	0.1
Calitzdorp	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.8	0.0
Hopefield	0.3	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.0

poverty, unemployment days, and infrastructure need. The districts are ordered by their contribution to province-wide poverty. Taking into account district population and public works project size, the mismatches noted in Table 3 between project location and works

expenditures captured by each district with their share of province-wide poverty, unemployment, and infrastructure persist. For example, Mitchell's Plain, the largest district with 18.4 percent of the provincial population, contains 28.5 percent of P_0 poverty (and 28.0 of the P_2 poverty), 35.0 percent of the unemployment days, and approximately 25 percent of the infrastructure need. And yet this district received 9.7 percent of total public works project expenditures, 6.5 percent of labor expenditures, and 20.8 percent of the training expenditures. Some districts have project allocations that far exceed their population, poverty, unemployment, and infrastructure need shares. For example, Belleville, with 6.9 percent of the population, 2.4 percent of the poverty, 4.6 percent of the unemployment, and 4.2-5.5 percent of the infrastructure need, secured 33.6 percent of the public works expenditures (but only 8 percent of the labor expenditures).

Table 5 presents correlation coefficients for the variables in Table 4. The district shares of poverty, unemployment, and infrastructure are strongly correlated to population

Table 5. Correlations between district shares of poverty, unemployment, and infrastructure and public works expenditures

	PMDPOP96	PCTP096	PUNEMPD	MDIFSC2	MDCOSTSH	MDTCSTSH	MDLABCSH
PMDPOP96	1.00						
PCTP096	0.81**	1.00					
PUNEMPD	0.92	0.96**	1.00				
MDIFSC2	0.91**	0.95	0.97**	1.00			
MDCOSTSH	0.37	0.28	0.28	0.31	1.00		
MDTCSTSH	0.60**	0.64**	0.64**	0.63**	0.82	1.00	
MDLABCSH	0.24	0.29	0.19	0.26	0.64**	0.51**	1.00

Notes: Number of cases = 42; 2-tailed Significance: * -0.01 ** - 0.001.

Key:
PMDPOP96 % of provincial population in district, 1996 census.
PCTP096 % of headcount poverty in province contributed by each district, OHS 1995 and 1996 Census.
PUNEMPD % of unemployment days contributed by district to provincial total, OHS 1995 and Census 1996.
MDIFSC2 % of infrastructure need in province from district.
MDCOSTSH % of public works expenditure in district.
MDTCSTSH % of public works labor expenditures in district.
MDLABCSH % of public works training expenditures in district.

shares. However, the district shares of total costs and labor costs are not statistically significantly correlated with any of these variables. At the overall level, there seems to be no correlation between resource allocation and need. But as Section 5 indicated, each project has its own method for locating projects. Does between-district targeting performance vary by program? Repeating the analysis in Table 5 on a program-by-program basis reveals that only three programs—the CAG program with 10 small projects (mean cost, 189,000 rand), the PILOT program with two large projects (mean cost, 5 million rand), and the NEF program with 29 medium projects (mean cost, 1.44 million rand)—demonstrate positive correlation between resource allocation and need.

7. TARGETING WITHIN DISTRICTS: THE USE OF WAGE RATES

With the exception of the CAG, NEF, and PILOT programs, we find poor correlations between the allocation of public works resources and the needs of the districts in terms of poverty and unemployment. But because the preceding analysis was at the district level, we cannot rule out the possibility that if we ranked all the communities within the province by average income level, the poorest communities might well not be in some of the poorest districts that have not received public works projects (e.g., Beaufort-West). Table 2, for example, shows that there is a much greater coefficient of variation (CV) in per-capita incomes within some districts compared to others. For example, Stellenbosch has a relatively high mean income and two public works projects, but it also has the fifth highest coefficient of variation in incomes,

indicating the likelihood of pockets of poverty. The above ranking scenario strikes us as unlikely, but we cannot quantitatively test our assumption, because we do not have income aggregates at the community level. This is something to pursue in further research.

Given the available data, what can be said about poverty targeting within districts? An economic measure, albeit crude, of the (self) targeting performance of the public works project within a district or community is the extent to which the projects set wages below market wages. This is because the logic of the self-targeting mechanism assumes that only the poorest people, i.e., those who are unable to get jobs in the labor market, will apply for the below-market rate public works job.[11] The ability of projects to set wages below market is mixed. Subbarao (1997) summarizes the international experience and concludes that public works wage rates are often at least as high as the market wage for a similar activity. This was often the case in South Africa as well, and Everatt (1997: 23) argues that reliance on the setting of wages below market levels is "a long way from being a sophisticated or well-thought-out strategy to reach and benefit historically disadvantaged groups" in South Africa, primarily because the approach does not recognize the causes of poverty.[12]

[11] There was some evidence from our research that when public works projects are of a fixed and short duration, lack of job security makes them even less attractive to those with prospects of obtaining market wage work, even in the face of a hypothetical higher wage in the public works project. On the other hand, the job training provided by the projects might make them more attractive to those with better prospects of obtaining market work. We did not, however, pursue this line of questioning in our research.

[12] Actual wage rates in the programs varied considerably by province. In the CBPWP, for example, wages ranged from a low average of R13.50/day in Kwazulu-Natal to a high of R33.50/day in Gauteng. Western Cape is close behind at R33.30 (CASE/ILO 1997).

In most countries that include public works as a poverty relief strategy, the principle of below market wages (or even food in the case of Food for Work programs) is generally accepted as a way of distributing some government resources to people who otherwise would have no income. In South Africa, however, the history and strength of trade union struggles for higher wages has meant that changing union-won labor standards is controversial. The principle of exempting public works from these standards was accepted in COSATU's and SANCO's signing of the Framework Agreement on Labour-Intensive Construction, and our research indicates that it was accepted in practice in much of the Western Cape. However, labor disputes were common throughout the country, including Western Cape Province. We look at this issue in more depth later in this section.

To what extent do the 101 Western Cape projects set wages below market levels? To operationalize such a comparison, we do our best to (1) identify the wage rates reported by households in the OHS 1995 dataset for unskilled work that is similar to that in the public works projects, and (2) correct for province-level inflation.[13] In principle, project wages are supposed to be set through local negotiation within national government guidelines following two main principles: that wages do not undermine the local economy, and communities are fully informed and involved in the decision. This

[13] Nevertheless, the use of district-wide wages in districts where labor markets are poorly developed and not well integrated is problematic. In such districts, activity-specific wage rates may vary substantially by sub-locality.

has not been a straightforward process, the reasons for which are analyzed in the following section.

Across all projects the mean of the ratio of the project wage to the comparable district wage is 0.78. Seventy-nine percent of all projects set wage rates below the district-wide wage rates. The rate varied by programs from 93 percent in the NEF to 56 percent for the CBPWP (both of the PILOT projects also set wage rates below market wages). The rate does not vary much by asset type—from 71 percent to water and sanitation projects to 89 percent for road and bridge projects. Within an asset type by program, the numbers of projects per comparison are small, and it is hard to draw firm conclusions, but it is striking that the NEF projects are able to set wages lower than the mean market wage, no matter which of the five asset classes their projects produce.

The setting of public works wage rates was taken up in 1994 by the Targeting Focus Group, commissioned by the NEF as part of its pre-investment investigation into the shape of a future national public works program. The group, about half of which was composed of NGO representatives and the other half of universities, trade unions, development banks, and business associations, proposed "self-selection" through wage rates and basic training. The group reported that "one of the strongest recommendations to emerge…was the need to specify minimum earnings" to ensure that jobs go to the poorest of the poor and are not 'hijacked' by the not-so-poor, employment is maximized, political pressure is removed at the project level, and the potential for political issues to derail the success of the program is reduced. It recommended that methods be put in

place to measure local market rates and that public works wages be set below them, "except where such market rates are less than subsistence rates" (NEF 1994c: vi-vii).

This wage-based targeting principle did not gain easy acceptance, however, nor did it avoid becoming a political issue. The long history and strength of trade union struggles for better wages and working conditions, and the way in which these were intertwined with anti-apartheid struggles, has meant that changing union hard-won labor standards, even for new job opportunities and training, has not been a straightforward process. The idea has generated heated debates over the significance and dilemmas for workers and for the trade union movement (Mtshelwane 1994; Seftel 1994; Judd 1994; NPWP 1995). While recognizing the benefits of public works schemes for fighting poverty, questions were raised about whether there is a point below which project wages should not go; how to resolve disputes where formal contractors work nearby, paying a higher wage; whether wages should be negotiated at project level or there should be regional minimums; and how to set task-based payments, working conditions and benefits, and other issues (NPWP 1995). It is significant, however, that COSATU and SANCO signed onto the Framework Agreement, accepting a task-based payment method that allows flexibility in wages, with the starting point below the industry minimum, in return for community participation, training, labor-intensive construction, and the construction of useful assets (NCC 1996). In 1998, following the first wave of public works programs, COSATU reaffirmed its advocacy of these programs, pressing the government to expand its investment. While indicating its willingness to agree again to the principles of the Framework Agreement, it also proposed that an agreement on wages,

benefits, and minimum standards for large-scale public works programs be negotiated (Daphne 1998).

In spite of COSATU's signing the Framework Agreement, the first wave of programs was plagued by labor strife. With a few important early exceptions,[14] in Western Cape Province, we found that trade unions had little involvement in the projects, but that a trade union discourse ran through many of the projects, with workers complaining of exploitation, organizing work stoppages and other practices learned through previous work experience or that of their family or neighbors. Of the 101 projects, 39 had strikes or labor disputes, and 27 ended with a higher wage than when they started (two ended with lower wages than at the outset). The vast majority of actions occurred without any involvement of trade unions. As explained by a former director of public works programs in the province, often workers would agree to a public works wage:

> Then once the project starts the workers down tools and demand more money, so there remain few options but to increase the wage because the power now lies in the hands of the community—the project has to be completed. Difficult to fire workers as they will intimidate new workers, a hopeless situation if one loses the support of the community. There is no option of hiring another contractor or binding workers to a contract

[14] The WCEDF Bloekombos project had a major strike that involved trade unions, an event that received national prominence and was the focus of some trade unionists' arguments against the standards being employed in public works projects (see Mtshelwane 1994).

> (personal interview, former acting director of Public Works Programmes, DTPW).

For this reason, some private-sector and local government engineers interviewed argued that it was better to pay formal-sector wages, as the below market wage approach was not worth the strife and lost workdays.

According to NPWP guidelines, workers are not supposed to determine the project wage. In the Western Cape, wages were set either according to national government guidelines, or set at project level by either contractors or community-based Project Steering Committees. The contractor in the Khayelitsha (Pilot Project) case study explains the difficulty of setting public works wages in urban areas:

> A project worker has a neighbor who works for XYZ Construction and he’s a laborer and earns R65 a day everything included. And he might be working in Khayelitsha and digging trenches and this guy works on the labor-based (public works) contract, just across the road. And he gets R25 or R30 a task and at the end of the day earns R35. The mindset is that it’s just not fair, it can’t be right. And his neighbor will come and tell him, ‘I'm earning R70 and you're only earning R35.’ We overcame this problem through the consultation process at the beginning. Getting the PSC to spread the message. And the message was that this project was picked as one of the pilot projects and for the benefit of the community. And the council was also involved (personal interview, contractor: Khayelitsha).

In the Langa project as well, workers explained that this process of discussion and education about public works projects helped the community to accept a lower than formal wage—in this project workers actually reduced the wage from its original level so that more workers could be employed. They also remarked that the government officials responsible "must come and discuss it with us and convince us why we should earn this little money" (Langa workshop).

The fact that CBOs running projects might result in lower wages was an unexpected finding: among the 101 projects, those with some real—as opposed to only formal—community participation, on average, had lower ratios of project to local-market wages than did projects with no community participation (Hoddinott et al. 2001). This is consistent with findings of other studies that have shown that communities in control of funds keep costs lower to increase the assets that could be built (Ghafoor 1987**;** Narayan 1998). Where community members stand to benefit from the savings, there is an incentive to spend less on wages. However, given the close alliance of trade unions and CBOs in the South African context, and the tendency for workers to demand higher wages, putting pressure on their comrades in the CBOs, we expected that CBOs making management decisions might be inclined toward granting higher wages. This was not the case. In our Langa case study, the incentive was not more assets for the community but rather what was perceived as greater equity: lowering the wage for everyone meant that more people had the opportunity for at least some work.

8. TARGETING WITHIN COMMUNITIES: COMMUNITY PARTICIPATION IN HIRING DECISIONS

Once localities receive funding for a project, the next part of the targeting process occurs when decisions are made as to which people in a community receive jobs. As discussed above, part of the process takes place in the self-selection of those who are willing to work for the low wage offered, but given the small size of the South African programs and the high unemployment levels in most black communities, there are almost always more people wanting jobs than jobs available. The process of allocating scarce jobs is done either by local government, engineering consultants, contractors, or CBOs. CBOs are often in this role because projects are required to have community participation and, despite broader intentions of the NPWP, most professionals on the projects see the role of worker liaison, including the hiring process, as one of the few appropriate roles for community committees. Community members also want to be responsible for hiring, as the allocation of scarce jobs in areas with high unemployment and poverty is a sensitive process and stakes are high. In six of our eight case studies, workers said that CBOs should be responsible for hiring, and CBOs played this role in 90 of the 101 projects (Adato et al. 1999).

In-depth accounts of community-based processes of worker selection were collected from seven of our eight case studies. Three different methods were used for selecting workers. Under one method, all unemployed people wanting work put their names in a hat and names were selected in a public meeting, with the committee

managing problems. In a second method, the names of those wanting work were put on a list at a public meeting and a reported consensus reached on who should get the jobs. Under a third method, the committee interviewed applicants and made decisions. This was considered a community process because selection criteria had been decided at a public meeting. The process devised by the community for the Khayelitsha project is described by members of the project steering committee:

> Ward T10 called a mass meeting of SANCO, where everybody was asked to write their names on a piece of paper and all the names were then put in a hat, they were taken one-by-one by a person who is not looking which name to pull, until the number of names is enough. Names selected from the hat would be people to be hired on the project. But if a name of a person who has employment comes up, the person is asked to withdraw and also if more than one name per family has been selected, one of them will be withdrawn and a new name selected from the hat (personal interview, PSC).

Although they do not use survey data to determine who most needs jobs, community members feel they are making equitable decisions based on need:

> Ward T11 people were also called to a mass SANCO meeting, then asked to put names of only unemployed people in alphabetically differentiated hats—letters are those of the streets…. All the letters asked people to go and decide on the two names of people whom each street/section thinks should be offered a job on the project—people of the street usually know who deserves to be given employment in the streets—it is easy to reach

> consensus on who should be helped—usually by the time jobs become available, the street would have already decided on which household needs assistance of what kind to survive (personal interview PSC).

In all three methods, transparency and democracy is one of the objectives pursued: it is seen as important that the community bought into the selection. Professionals on the project also feel this is important, because of the potential for disruption of the project if communities do not feel they have been part of the process or are unhappy with the outcome. As explained by the Khayelitsha City Engineer responsible for the Pilot Projects:

> People want to get involved here, because there are jobs that come out so one has to respect that and take cognizance of it and accommodate it. And if you don't do it in any case, if you think it's going to take longer because you've got to consult a committee, you're making a big mistake. Because if they don't want you to do it, you won't do it—you won't get the job going. They will just come around and make a lot of trouble. And if I were them I'd most probably do it myself, as well. You know, I'm sitting in a shack down there, and there might be a job opportunity here, and no one consults me or my representative, and then I'll also "maak maracas" and also go and bugger up everything and I—I think the way to go is we have to consult the committee.... This [is how this] community works—they're a very, very tightly knit bunch of people and they have other priorities than we have. We must bring them on board (personal interview, City Engineer, Khayelitsha).

There is, however, a potential tension between the democratic and poverty alleviation objectives. While a poverty targeting perspective on equity claims that the "poorest of the poor" should get jobs, the hat system implies that everyone gets an equal chance. Of course everyone must be unemployed, but beyond that, community members felt more satisfied by a random rather than a purposive, targeted selection.

Another way in which community-defined selection criteria have the potential to be at odds with poverty targeting occurs when committees have chosen to give priority to those who are active in community affairs. The CASE/ILO (1996) evaluation of the CEP found that people with organizational memberships were disproportionately represented in CEP projects, and saw this as evidence of abuse.[15] While abuse is certainly one possible outcome, our case studies revealed a different way in which political factors play into the targeting system, and help to explain why people see nonpoverty related criteria as fair. It is perceived as equitable to reward people who work hard for the development of their communities. In the Khayelitsha projects, the leadership was given permission by the community to always keep 10 percent of spaces on a job/project and allocate the ten spaces as they please, "based on the recognition that people in the leadership positions also do not have jobs and people in their families are equally unemployed and are looking for jobs" (personal interview, PSC). In the Langa project, street committee members interviewed were split on this issue: "it could be right and it could be wrong" (personal

[15] The CASE/ILO study found that 41 percent of rural people nationwide belong to organizations, compared to 80 percent of CEP workers, and that in some cases, community participation led to abuses: "The committees largely comprised local leaders; jobs seem to have gone to members of their organizations" (CASE/ILO 1996).

interview, Street Committee). On the one hand, there is the potential for nepotism. On the other hand:

> It is the people who do not come to meetings who give problems when some decision has to be taken because they do not understand procedure and do not know the leaders to be able to know how the community laws are. These are the people who sit and watch 'The Bold and Beautiful' while we and some of us work hard to bring jobs and projects to the community and formulate community governing laws for which we then become criticized by the same people who do not come to meetings and participate in decisionmaking processes. Basically it is very difficult to deal with community issues. It was difficult to choose the people who deserve to be employed, because people do not want to agree whom the poorest of the poor are. I do not think there could be any solution to this problem (personal interview, Street Committee).

An additional issue debated by community-based and other participants in the public works projects was the question of whether priority should be given to people with no skills and no work experience, or those who have some skills. On the one hand, that those who have had no opportunity to get ahead can be given a first chance by public works programs, a chance unlikely to be given them by the formal sector. On the other hand, the principle of job training envisions a gradual process, where people with some experience can grow through public works projects, getting them to the point where they get stable employment in the formal sector. This dilemma was underscored in projects where workers were taken in several-month shifts and there were objections to the same

people getting shifts twice. Given that some projects last as little as three months and developing marketable skills take longer than this, there is a tradeoff that must be faced.

One more consideration that all of these issues point to is that there is educational value to having communities involved in worker selection. This derives from the notion of "participation as an end" (Nelson and Wright 1995) rather than only a means, where the involvement of communities in selecting workers is itself part of the development process, building decisionmaking capacity in communities even if the decisions are imperfect. Such participation required people to think through tough issues around the allocation of scarce community resources, and devise mechanisms to maximize fairness. Development researchers and practitioners can also learn from observing such community practices, using them to inform choices made in the process of devising targeting schemes.

On the other hand, these factors of educational value and democracy should be weighed against another consideration raised by the trade unions in South Africa, which have raised objections to community members' involvement in hiring and firing workers. A prominent official who represented the construction workers union in the Framework Agreement process argues that this type of community participation presents people with a conflict of interest, and that this role is better left with employers (in the private sector or government) who should shoulder this responsibility:

> From our point of view we felt that community structures have got nothing to do with employing and firing people because that puts them exactly in

> conflict with their own communities. What they have to do is to be part of the decision in terms of what projects must be run and how must they be run and how should the community benefit.... But then to take those structures and make them part and parcel of the Industrial Relations situation, it creates problems as it has created problems in various areas. For instance in the Western Cape, in the Eastern Cape, Kwazulu Natal, and in the Northern Province, that's where we had conflict.... Our feeling was that they should not be used to hire and fire people because they are not experts in terms of the Industrial Relations. So the employers knew exactly when they were using them because they were trying to cover themselves so that they are not going to be responsible for whatever situation attains in as far as the Industrial Relations is concerned (personal interview, Construction and Allied Workers Union senior official).

The position of the trade unions must be viewed as a dilemma of democracy, because our research found a strong conviction among community members that they should be responsible for hiring decisions (we have little evidence on firing, though some committees said that they should be consulted in contractors' decisions on firing). This does not necessarily mean that they should have this role. One union official active in the public works debate argued for labor standards in projects that "protect communities from themselves" (Seftel 1994). These are dilemmas that need to be debated in South African policy forums with the trade-offs acknowledged. The tension between participatory democracy and best outcomes for a broader public interest is as old as democracy itself, and community-based public works projects are no exception.

Nowhere is this tension more pronounced than in the question of targeting women, where the program objective of community empowerment has clashed with the objective of employing women. The targeting of women for employment was an objective of six of the seven public works programs studied, but, as in the national studies of the CEP (CASE/ILO 1996, 1997), we found that community-run projects gave insufficient priority to women. The provision of income earning opportunities to women has been shown to provide many benefits to household welfare over and above the benefits that would be derived from giving men an equal opportunity (Haddad 1999). The participation of women is also important from an equity viewpoint. This perspective is embodied in the RDP and various NPWP documents. At the program and project level, the targeting of women met with mixed results, promoted successfully by government in some, but simultaneously constrained by cultural bias within communities and the construction industry.

Among the 101 projects in Western Cape, women made up nearly 39 percent of nearly 1.4 million person days of work generated, a figure that should be considered good performance, given that these involved mainly construction activities. This varied considerably by program and by type of asset. The FWWP and Transport projects do particularly well in this regard, with 51 and 44 percent of employment days being generated by women, respectively. The NEF, PILOT, and CBPWP projects do least well, with corresponding percentages being below 15 percent.

The case studies provided the opportunity to explore in depth the reasons why women were or were not employed in public works projects. The main factor,

encountered in six of the eight case studies, was the perception that the work activities, particularly the construction activities, were “men’s work.” This attitude was expressed mainly by community members (primarily workers and, to some extent, committee members), though it is reasonable to suspect that construction contractors may also have this attitude. Even where numbers of women on construction projects were high, women were not necessarily doing the same tasks as men. For example, on the Khayelitsha roads project, women were mainly doing lighter jobs: loading, sweeping, and clearing. It was explained that curbs weigh 100 kg and it takes two strong people to handle them. This bias suggests that one way of targeting women is through choice of project activity. This is supported by the full project dataset, where the percentage of employment days to women was lower for the six construction-related activities (10.2 to 32.6 percent) than for the two environmental activities (40.3 to 47.5 percent).

We also found, however, that there was notable variation among asset types within programs. For example, across roads and storm water projects, the mean employment days to women ranged between 11.4 percent in the Pilot program to 46.7 percent in the RDP Transport program. Across alien vegetation clearing activities, this ranged from 18.7 percent in the CAG program to 51.1 percent in the FWWP program. This underscores a finding of the case studies, which is that programs where strong government directives are given to employ women can be successful at reaching women even where there is a bias against employing them in certain types of activities. The FWWP had a 50 percent quota for the employment of women. However, the poor performance of the Pilot program and the CBPWP—both NPWP programs that formally

stress women as a target group—also suggest that formal directives are only as effective as their implementation.

The value of program directives to employ women is also emphasized by the comments made by project participants regarding the effect of seeing women working in unconventional roles, where the fact of their participation helps to break down bias. In five of the case studies, comments were made that women work well—in some cases better than the men. In the Langa project, for example, the supervisor said that one of the new things that came out of this project was the lesson that "most of the women, they know how to do the men's job…. You will not struggle and think because they are ladies they can't push the wheelbarrow, they can't plant a garden, no. I would even select more women than men" (personal interview, Langa supervisor). A road construction subcontractor who trained with women in Khayelitsha said that "if they…train the women like they trained us, there's no difference between a man and a woman."

9. CONCLUSIONS

South Africa's public works programs have been among the most innovative in the world, with multiple objectives that include not only job creation, poverty reduction, and infrastructure development, but also simultaneously job training and community capacity building. This gives the programs a development potential that is commendable, but also involves some potential trade-offs.

Our province-wide analysis of seven public works programs has confirmed the findings of national evaluations of one of the programs, the CBPWP, that there is little evidence of the targeting of public works to the poorest among the poor, whether within districts, municipalities, or communities. But our study has gone far beyond previous works by exploring the targeting issues at between-district, within-district, and within-community levels. Between districts, the 101 public works are not well-targeted in terms of poverty, unemployment, and infrastructure. Some districts with very high poverty and unemployment (Beaufort West and Morreesburg) have no labor-intensive public works projects. Some districts with low poverty rates contain four or more projects (e.g., Strand, Simonstown, Wynberg, and Clanwilliam). Mitchell's Plain, which has 18 percent of the provincial population, 29 percent of the provincial poverty, and 38 percent of the provincial unemployment, attracted just 8 of the 101 projects, accounting for 10 percent of total costs and 6.5 percent of the labor costs, province-wide. With the exception of training costs, a small component of public works expenditures, the district share of province-wide public works expenditures was uncorrelated with district poverty, unemployment, or infrastructure shares. When we disaggregated the projects by program, we found that the NEF projects did well in allocating labor and training costs in proportion to poverty, unemployment, and infrastructure need shares. The two Pilot Programme projects also did well in this regard, with weaker evidence that the CAG did so too.

If the goal of the provincial government is to encourage the allocation of public works resources to districts that are the highest priority in terms of poverty,

unemployment, and poor infrastructure, departments responsible for allocating resources need to (1) review and strengthen as necessary each program's monitoring system for basic data, such as employment days generated (by gender) and the percentage of costs to labor and training needs, as the state of management information systems has been very weak; (2) create and use poverty, infrastructure, and unemployment maps at the district level (using existing data)—this will help officials to monitor the impact of their projects on the poor; and (3) strengthen cross-program communication about the need to target resources between districts, and how to actually do it.

It is understandable within the institutional and political context of South Africa following the transition to democracy that in the first wave of programs, a high priority was placed on meeting the programs' multiple objectives—including the criteria of job training and community participation—with everyone seen as needing infrastructure and jobs. However, lessons learned from this first wave point to the need to consider these criteria and relative need and poverty, so that better-off areas do not get multiple projects, and poorer communities get few or none. In particular, in demand-driven programs such as these, attention should be given to communities that might submit poorly prepared applications precisely because they are very poor, without local government, CBO, or private-sector advocates with strong capacity. The case studies and interviews with program-level key informants revealed the strong role that engineering companies have played in this regard, and the fact that in some cases, funds are going to better-endowed local authorities that already have the resources to build the infrastructure without assistance from special public works programs. All of this suggests that demand-driven

programs are not always the best mechanism for reaching the poorest communities, or aggressive outreach by the provincial government may be necessary in some cases.

In terms of targeting projects to the poorest of the poor within districts, 78 percent of all projects set wages below this market wage, with the NEF projects doing this the most consistently. The NEF projects were more consistent at this, no matter the asset being created. In South Africa, the historical role of labor unions and their voice in government has meant that setting wage rates below the market wage has been more controversial than in many other countries, where this principle is widely accepted. Some unions have accepted the principle that, as long as there is monitoring of the process, and the infrastructure constructed benefits the people working on the project. At the project level, however, when wages for comparable work in the formal sector are easily observed by the project workers, it is still a challenge to recruit unemployed workers at below market wage. Often workers accept the offered public works wage, but later strike for higher wages. Many of the projects in our study started at a low wage, but wages were raised at a later point. Some contractors and local government officials feel that it is preferable to pay the higher wage than deal with labor strife. On the other hand, CBO-led projects tended to set a lower wage in relation to local market wages. Our case study material suggests that workers sometimes—but not always—will lower their wage expectations if they see the potential benefits of the project to their community.

In most of the projects studied, worker selection was mainly handled by community members. The processes were generally need-based in that poverty and unemployment were necessary criteria for eligibility, although those chosen might not be

those most in need. Equality of opportunity was often a high priority, so a random system was used. Community members also saw it as equitable to give some jobs to people who had given their time to promoting community development. Trade unions raise questions about the ethics of turning over hiring and firing decisions to people from the same communities as the workers, questions made more difficult by the debate over democracy: in many communities, members fiercely want to be responsible for these decisions, which directly affect the livelihoods of their family, friends, and neighbors. This system also runs the risk of nepotism, but our case studies reveal that this does not necessarily occur. It can also be monitored through the participation of (or observation by) local councilors in public community selection forums. There are several advantages to allowing communities to handle or participate in selecting workers: (1) although their perspectives may not have statistical precision, local people often know who in their communities are very poor and who might be suffering a crisis or have the least income earning potential in their households; (2) they may take into account other considerations that reflect community priorities; (3) if community members are excluded from hiring decisions and are dissatisfied with the outcomes, they can disrupt the projects; and (4) there is an educational process that takes place as community members struggle with tough decisions about allocation of scarce resources that have alternative uses, and learn how to manage a decisionmaking forum.

Nevertheless, the potential for a conflict between community participation and other valuable program objectives should not be overlooked. Nowhere is this more evident than in the issue of targeting women. Our case studies and project-level dataset

revealed historical biases against employing women in construction work, biases that can be overcome through strong and effectively implemented government directives, which, in turn, help to overcome these biases by showing that women can do the work. Nevertheless, there will remain a tension between the objectives of community control and employing women that will have to be resolved through policy debates.

Socioeconomic data are available to assist programs and local government in targeting public works resources between districts. Some such data may also be available at the community level, which should be used for these purposes and further refined whenever possible. Within communities, however, the community itself is in the best position to allocate resources. However, community participation mechanisms need to be transparent, accountable, and open to participation from outsiders, so that local power relationships and biases against certain groups such as women do not exclude people who may most need jobs.

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