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Measurement and Meaning

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Estanislao Gacitúa-Marió
Quentin Wodon

The World Bank
Washington, D.C.
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FOREWORD

The World Development Report on *Attacking Poverty* recommends looking at the multi-dimensionality of poverty, including social disadvantage, vulnerability, and powerlessness. To deal with these issues, the World Bank has enriched its traditional quantitative analysis of poverty with qualitative and participatory research. The Bank’s evolution towards broader forms of assessment of disadvantage and the use of qualitative as well as quantitative methods results in part from the lessons of the existing evidence in the development literature. But it is also a response to the challenges faced in its lending operations. Quantitative methods have long been used for project design, for example in improving the targeting and implementation of interventions on the basis of monitoring and evaluation studies. But qualitative methods have also proved essential in identifying key social issues, assessing stakeholder interests and interactions, their likely effect on proposed Bank operation and the potential consequences for individuals and groups. In Poverty Reduction Strategies Papers as well, qualitative research has been essential to complement the traditional focus on quantitative analysis.

The need for a richer understanding of poverty and disadvantage through the combination of quantitative and qualitative methods has particular resonance in Latin America. With democracy consolidated in most countries, the challenge of empowerment goes along with that of citizenship and the right of the poor to have their voices heard and faithfully reflected by development researchers. Persistent inequities have contributed to the use of the concepts of exclusion and inclusion in both civil society and government circles, and the region’s socio-cultural diversity is an additional reason to systematize the used of mixed research techniques in applied work.

Qualitative techniques are specially suited to understand the subjective meanings of poverty; the perceived barriers to escaping it; the political, socio-cultural factors determining it; and the intra-household dimensions and dynamics. The use of quantitative and qualitative techniques under an integrated framework (as the social exclusion framework proposed by the authors in the introductory chapter) is specially helpful to identify premonitory signs of poverty, inequality and marginality and to assess the likelihood that new groups may fall under poverty or the conditions under which it may be reproduced in the future; to understand the processes conducive to poverty and, thus, to better evaluate the effectiveness of anti-poverty programs; and to recognize the most serious poverty and exclusion risk factors present in a given place or territory and thus to better design adequate social safety nets.
This report presents three case studies drawn from World Bank economic and sectoral work recently completed in Latin America. Each study takes a social exclusion approach and relies on both types of research methods to analyze the factors and processes contributing to poverty and social disadvantage. The quantitative methods include statistical and regression-based analysis. The qualitative methods range from key informant interviews and semi-structured interviews to focus groups.

I hope that this report will contribute to promote a broader use of mixed research techniques not only by World Bank staff, but also by other parties interested in development policy and poverty reduction.

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Chief Economist
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ABSTRACT

This report consists of a collection of case studies from Latin America combining qualitative and quantitative research methods for the analysis of poverty within a social exclusion framework. The first chapter provides an overview of the differences between quantitative and qualitative methods, and the gains from using both types of methods in applied work. The other chapters are devoted to three case studies on reproductive health in rural Argentina, the targeting of social programs in Chile, and social exclusion in urban Uruguay. Each case study was prepared within the broader context of country-specific economic and sectoral work at the World Bank.
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The case studies were originally written as part of country-specific economic and sectoral work at the World Bank. They were presented in seminars where the authors benefited from valuable feedback. Chapter 2 on reproductive health in poor rural areas was presented at the August 2001 meeting of the Society for rural sociology in Albuquerque, New Mexico, and in discussions with Government officials in Argentina. Chapter 3 on the targeting of Government programs was presented in the World Bank’s May 2001 Economists Forum and in discussions with Government officials in Chile. Chapter 4 on social exclusion in poor urban neighborhoods was presented at the October 2000 LACEA conference in Rio de Janeiro, at a January 2001 brown bag seminar in the World Bank, and in discussions with Government officials in Uruguay.

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CHAPTER 1

COMBINING QUALITATIVE AND QUANTITATIVE METHODS FOR POLICY RESEARCH ON POVERTY WITHIN A SOCIAL EXCLUSION FRAMEWORK

Carine Clert, Estanislao Gacitúa-Marió and Quentin Wodon

INTRODUCTION

There is a wide consensus on the need to look at the multi-dimensionality of poverty, including issues of social disadvantage, vulnerability, and powerlessness. Within the World Bank, this evolution in the analysis of poverty is reflected in the shift of the World Development Reports on poverty from a focus on low-consumption and low achievement in human capital in 1990, to a broader approach dealing with opportunity, security, and empowerment in 2000 (World Bank, 2001). Although vulnerability is not a synonym for poverty, it contributes to it. It implies both an exposure to risk (whether short-term or long running), and a difficulty in coping with these risks (Chambers, 1989). Another important concept is that of social exclusion, which prevents the poor from having access to assets and markets, and from participating (and being represented) in society. Social exclusion is associated with discrimination on the basis of age, ethnic origin, or gender, among other characteristics, and thereby with poverty. Still another influential concept is that of social capital, with its focus on the role of networks and relationships as assets. Many of these new concepts acknowledge that both the questions that we ask and how our knowledge is organized are mediated by pre-existing social structures. These structures need to be accounted for in order to have a better understanding of the research questions themselves and the processes shaping the issues.

To deal with these new concepts, along with other international agencies, the World Bank has enriched its traditional quantitative analysis of poverty with qualitative and participatory research. Recent examples include the *Voices of the Poor* project devoted to the perception of the poor of their own situation (Narayan et al., 2000), and a report done in partnership with the International Movement ATD Fourth World on how to reach the extreme poor and make institutions more sensitive to their needs (Wodon, 2001). The Bank’s evolution towards broader forms of assessment of disadvantage and the use of qualitative as well as quantitative methods results in part from the lessons of the existing evidence in the development literature. But it is also a response to the challenges faced in its lending operations. Quantitative methods have long been used for project design, for example in improving the targeting and implementation of interventions on the basis of the findings from monitoring and evaluation studies. But qualitative

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research tools have also proved essential in identifying key social issues, assessing stakeholder interests and interactions, their likely effect on proposed Bank operation and the potential consequences for individuals and groups (Clerf et al, forthcoming; Gacitúa-Marió et al. 2000). In Poverty Reduction Strategies Papers (PRSPs) as well, qualitative research and findings have been found essential to complement the traditional focus on quantitative analysis.

The trend toward a richer understanding of poverty and disadvantage through the combination of quantitative and qualitative methods has particular resonance in Latin America. With democracy consolidated in most countries, the challenge of empowerment goes along with that of citizenship and the right of the poor to have their voices heard and faithfully reflected by development researchers. Persistent inequities have contributed to the use of the concepts of exclusion and inclusion in both civil society and government circles, and the region’s socio-cultural diversity is an additional reason to systematize the used of mixed research techniques in applied work.

In order to promote a broader use of mixed research techniques by World Bank staff and other interested parties, this report presents three case studies drawn from World Bank economic and sectoral work recently completed in Latin America. Each study takes a social exclusion approach and relies on both types of research methods to analyze the factors and processes contributing to poverty and social disadvantage. The quantitative methods include statistical and regression-based analysis. The qualitative methods range from key informant interviews and semi-structured interviews to focus groups. In this introductory chapter, before presenting the three case studies, we provide some general background regarding the need for combining quantitative and qualitative methods for the analysis of poverty within a social exclusion framework.

**ARGUMENTS FOR COMBINING QUANTITATIVE AND QUALITATIVE METHODS**

The arguments for combining quantitative and qualitative research methods are well known (Bourdieu 1992, Neuman 1999) and have been recently summarized in several Bank related publications (Bamberger 2000; Baker 2000; Coudouel, Hentschel and Wodon 2001; Hentschel 1999). Neither approach is better than the other. Both have strengths and weaknesses. There are often gains in combining both approaches and the issue is to choose the most appropriate combination once the problem or research question to be examined has been properly defined (e.g., Bamberger, 2000).

Methods based on statistics provide robustness to the results if they rely on appropriate samples, and regression analysis helps to control for a large number of other variables when measuring the impact of a specific variable on a given outcome. Yet quantitative data cannot fully capture causality because of their failure to provide contextual information (Hentschel, 1999). Qualitative methods such as participant observation or community surveys with key informant interviews help to shed light on the economic, socio-cultural and political context of the processes under study. In project evaluations, the combination of quantitative and qualitative research techniques is especially important because “qualitative methods allow the in-depth study of selected issues, cases, or events and can provide critical insights into beneficiaries’ perspectives ..., or the reasons behind certain results observed in a quantitative analysis” (Baker, 2000:8). Said differently, qualitative assessments “provide a better understanding of stakeholders’ perceptions and priorities.”
In the specific case of policy research on poverty, inequality, and vulnerability, Coudouel, Hentschel, and Wodon (2001) suggest that qualitative methods serve three purposes: i) help design appropriate household survey questionnaires; ii) assess the validity of survey results at the local level and evaluate how much policy responses should take into account the heterogeneity of local conditions; and iii) gather information that household surveys are not able to capture, or can capture only partially. Regarding this last purpose, the authors refer to assessing dimensions of poverty such as (among others): its subjective meanings; perceived barriers to escaping it; political, socio-cultural factors determining it; and intra-household dimensions. Qualitative methods also help in addressing research questions that cannot be answered easily through quantitative methods. For example, qualitative methods make a unique contribution to the understanding of processes shaped by the subjective perception of the social actors.

ARGUMENTS FOR USING A SOCIAL EXCLUSION FRAMEWORK

The social exclusion framework (SEF) has been proposed as a heuristic device to understand the linkages and interactions between different risk factors (economic, social, cultural, political and institutional) which generate poverty and inequality (Gacitúa-Mario et al. 2000). The SEF acknowledges that the risks factors are not linked through linear causality but rather in a complex process of reciprocal causation and interactions. Beyond being “goods-centered” (traditional poverty work seeks to improve the command on goods and services of the poor), the SEF is also “people-centered” (following Sen’s work on the importance of freedom and capabilities to achieve functioning) and “institutions-centered” (since exclusion is a process rather than a condition at a given point of time, the role of institutions in permitting or creating exclusion must be analyzed). The SEF also contains both an objective and subjective dimension, to the degree that it considers both the objective conditions of people’s lives and their perceptions of being connected or disconnected from wider spheres of social, political and cultural life.

The SEF is not a substitute for traditional poverty or vulnerability analysis. It fully recognizes the importance of the traditional dimensions of poverty, such as the inability to generate a sufficient and stable income and to have access to quality social services in order to meet basic needs. The advantage of the SEF is that it provides a framework for interrelating different levels of analysis (multidimensionality) and cumulative processes that maintain or pull social groups into social disadvantage. It also incorporates other dimensions that belong to the relational/symbolic domain: the socio-organizational cultural and the political. Social exclusion is a process through which social groups are wholly or partially excluded from full participation in the society in which they live due to the cumulative effect of risk factors. In fact, all social groups are exposed to some risk factors. The problems develop when risk factors start to build up in time and space and the affected group cannot control them. As a consequence, the affected groups are exposed to the cumulative pressure of a multiplicity of risks, one of them being the lack of income, engendering a more or less permanent state of deprivation and destitution.

The distinction between social exclusion as a process and poverty as a social condition allows the policy maker to find ways and instruments to fight the risk factors before it is too late, that is, before the processes of social exclusion result in extreme poverty. Policy makers can also take coherent sets of measures taking various dimensions of poverty into account. Furthermore, the SEF leads to social agency, i.e. the process that makes it possible for those who have run into a situation of poverty to come out of it by mobilizing available resources to eliminate or control
the risk factors that have engendered it. The central value added by the SEF lies the emphasis on dynamic processes where institutions and agents are involved in the analysis, for example of extreme poverty. This refers to the ways institutions, rules and perceptions interact to generate or combat processes of social disadvantage. Depending on the context or problem being examined, different types of processes may including the possible impact of economic processes on the functioning of the markets; institutional modifications on the social policy system; or cultural practices on the exclusionary or inclusive behavior of certain institutions. In this framework, Government-backed public policies intervene in the regime of social risk by providing resources to those affected. Equally relevant are those regimes that people themselves produce by getting together and getting organized. These are voluntary organizations, neighborhood associations, NGOs, both profitable and non-profit enterprises, neighborhood committees, and so on. As a matter of fact, each of these aggregations arises from the need to reduce a danger or a risk.

**QUANTITATIVE AND QUALITATIVE METHODS IN A SOCIAL EXCLUSION FRAMEWORK**

The arguments supporting integrated research methods under a social exclusion framework can be extended further by referring to what scholars call research access. While no hasty conclusions should be made about the advantages of qualitative research techniques (respondents may refuse to be interviewed while they may accept to fill in an anonymous questionnaire), qualitative methods remain best suited to address sensitive issues such as exposure to violence and the psycho-social dimensions associated with it. First, developing a relationship of trust with the “researched” is essential for breaking walls of fear or shame and improve data collection. Second, the possibility to adopt a “non-threatening language” and to adapt the language according to the type of actors under study is also essential for the discovery of knowledge (Buchanan, 1988). For municipal agents at the lower echelons of the hierarchy in the Chilean case study in chapter 3, for instance, the risk of under-reporting was considerable as discussions related to their frustrations with the system of targeting. The language of ‘learning from your experience’ was adopted and well received. Thirdly and lastly, accessing certain types of interviewees such as elite interviewees, high-level officials or firms may require official and technical steps as well as informal strategies and opportunities- all of which can hardly be achieved by sending out a questionnaire.

A second series of arguments in favor of integrated research methods relates to the potential of using actor-oriented perspectives in poverty research. An actor-oriented perspective entails “recognizing the ‘multiple realities’ and diverse social practices of various actors, and requires working out methodologically how to get to grips with these different and often incompatible social worlds (Long and Long, 1992:4)”. In poverty research, key actors include not only the poor, but also firms and professionals concerned with poverty reduction at both civil society and government levels. The experience and voice of the poor as citizens is starting to be better captured, and civil society organizations such as NGOs tend to be better included in opinion surveys. But the perspective of government professionals at the different echelons of the policy process still tends to be overlooked, or at least not systematically and rigorously researched. As argued by Clert (2000), this is true for research on social exclusion in developing countries.

A contribution of the French literature on social exclusion has been the in-depth interviews with social workers. In Paugam (1993) for example, insertion or inclusion are seen as an operative concept which cannot be fully apprehended without an adequate understanding of the roles,
values and practices of a wide range of actors involved in the policy process, from the politicians in the National Assembly debates to senior officials and social workers in the field. In the British literature as well, this kind of research focus has emerged recently (Barry, 1998). But in developing countries, there is still a lack of focus in the qualitative literature on the perceptions of policy makers. At the World Bank as well, while social assessment and institutional analyses do include the views and experience of public officials, consultations in poverty research and strategies seem to remain mainly concentrated on civil society representatives. This might be a missed opportunity given the interest of the Bank to support increased ownership of clients and better understanding obstacles to articulated strategies poverty reduction and social inclusion.

A last series of arguments in favor of integrated research methods in a social exclusion framework relates to policy making. Qualitative data derived from interviews and focus groups is often criticized for its subjectivity. This is a legitimate concern, and it underscores the fact that qualitative research methods must be implemented rigorously by well trained researchers, with their results ideally supported by further quantitative analysis. But at the same time, policy oriented social analysis is concerned with change and agency - i.e., how program beneficiaries, the social workers in the field, and the policy makers can act outside and sometimes against a system which makes the poor vulnerable and disadvantaged. In this context, the question of the subjectivity of the actors, and how as persons they perceive their situations of deprivation and/or the limitations of their interventions is key to understanding the basis of agency.

In conclusion, the use of integrated methods under a social exclusion approach has four main advantages: (i) it contributes to the empowerment of the social actors by incorporating the knowledge of the subjects and it enhances the transparency, accountability, and thereby effectiveness of policy interventions; (ii) it helps to identify premonitory signs of poverty, inequality and marginality and to assess the likelihood that new groups may fall under poverty or the conditions under which it may be reproduced in the future; (iii) it enables decision-makers to set priorities by identifying the processes (and different factors) conducive to poverty and, thus, to evaluate the relevance, and effectiveness of anti-poverty programs and; (iv) it allows to profile the most serious risk factors of social exclusion present in a given place or territory. This last point should be emphasized because many social exclusion phenomena depend on the way in which the territory is physically, economically and socially organized. Therefore, the SEF makes it easier to carry out the analysis of the degree of exposure to risk of specific social groups.

Presentation of the Case Studies

The next three chapters provide case studies from World Bank economic and sectoral work combining qualitative and quantitative research methods for the analysis of poverty and social exclusion in Latin America. The case studies are devoted to reproductive health in rural Argentina (chapter 2), the targeting of social programs in Chile (chapter 3), and social exclusion in urban Uruguay (chapter 4). There are variations between the case studies in terms of their objectives and context justifying the use of mixed quantitative and qualitative research methods.

In chapter 2, statistical and econometric methods are combined with focus groups of men and women so as to provide a better understanding of reproductive health issues for poor families living in rural Argentina. The quantitative methods are used to describe the families and their use
of family planning devices, and to analyze the impact of contraception on the probability of delivery as well as the impact of delivery on work patterns. The qualitative methods provide finer information on women's and men's attitudes on a broad range of sensitive issues related to their respective productive and reproductive roles, and the interaction between these roles.

In chapter 3, the authors use mixed research methods in order to evaluate the targeting performance of government social programs in Chile, i.e. to assess the ability of social safety nets to reach the poor and vulnerable. Using data from a nationally representative survey, the quantitative methods are used to measure the targeting performance of various programs relying on the same means-testing instrument (the so-called ficha CAS). The qualitative methods elicit insights into the fairness and effectiveness of the targeting methods, as experienced and perceived by poor citizens and practitioners using those methods in their daily work.

In chapter 4, the author uses both types of methods so as to capture the links between exclusion and poverty. Initially prepared for the poverty assessment for Uruguay in a context of high inequalities and rising area-based marginalization, the study complements quantitative analysis with interviews and focus-groups so as to obtain a better understanding of key vulnerable groups exposed to processes of exclusion. Quantitative methods provide the basis for the selection of the areas where the qualitative study is done and for the identification of specific groups of interest. The qualitative analysis explores the dimensions of exclusion more in-depth and collects information on existing perceptions of exclusion in various settings, including labor markets.

Many of the arguments presented above as to the gains from combining alternative methods in policy research can be illustrated with the case studies. Without going too much in details, a few illustrations can be provided. In chapter 2 on reproductive health, the authors stress the importance of the cultural context and intra-household power relations. Qualitative findings guard against hasty conclusions derived from the regressions. For example, while the regression results suggest that economic status does not affect the probability of using contraception, the focus groups indicate that cost is a major constraint for access to pill and intra-uterine devices. Similar nuances between quantitative and qualitative findings are found in chapter 3 on Chile. While the results from the quantitative analysis suggest fairly good targeting overall, the qualitative analysis points to the fact that the targeting system does not handle vulnerability well. The value of qualitative methods as a tool for actor-oriented policy research is also illustrated in chapter 3. In that chapter, the actor-oriented approach allows for assessing possible deficiencies in the fairness and effectiveness of means-testing instruments, as seen by social workers. In all chapters, the qualitative work enables the authors to reach a finer understanding of the issues involved. In Argentina, the statistical analysis touches on forced sexual relations as a cause for pregnancies. But focus groups suggest that the phenomena is under-reported, and they shed light on role of incest in early pregnancies. Similarly, the women's perception of the quality of the health service is partly assessed by the statistical survey through a ranking question. Results from focus groups provide additional information on mistreatment. This shows the need to respect women's opportunity to express in their own words how they feel about the services.
Chapter 1. Combining Qualitative and Quantitative Methods

CONCLUSION

Social and behavioral sciences have used many different experimental and quasi-experimental methods to approach their research questions, leading to what Ritzer (1975) calls a multi-paradigmatic discipline. The problem with most methods taken individually, including formal methods in mainstream economics, is that they take for granted the context and relationships that constitutes the phenomena under study. According to Bourdieu (1992), the objectivist point of view reifies the structures it constructs by treating them as autonomous entities and slipping from model to reality. At the other end, the subjectivist or constructivist point of view asserts that social reality is an ongoing process that social actors continually reconstruct, failing to see the existing regularities. A key challenge for policy is to analyze the objective conditions of reality while identifying how perceptions influence reality. For this, a flaw of most approaches to knowledge generation is methodological monism and the opposition between theory and research, between quantitative and qualitative methods.

A methodological approach involves a theory on how a research question should be analyzed. A research method is a procedure for collecting, organizing and analyzing data. There are important connections between methodologies and research methods. Research methods mediate how our knowledge of the world is organized. "It is a truism that methods per se mean little unless they are integrated within a theoretical context and are applied to data obtained in an appropriately design study" (Pedhazur, 1982: 3). The issue then is what are the research questions that we ask and why we ask those and not others. Only after having clearly defined the issues under study, can we look at the array of methods available and choose those that fit the problem, taking into consideration that both quantitative and qualitative methods may be complementary or even necessary.

While the World Bank used to rely mainly on quantitative methods in the past, it is now agreed that the analysis of socio-cultural and institutional issues requires an assessment of processes and values as well as the perceptions individuals have of them, all of which cannot be adequately addressed by quantitative methods alone. Qualitative research helps to identify likely sources of support or opposition to poverty reduction interventions, and it contributes to the assessment of the operational feasibility of the proposed interventions, their sequencing, and the selection of appropriate social and institutional arrangements to promote social inclusion and empowerment. Especially when it takes into consideration the rules, values, and perceptions of the groups involved, qualitative research ensures that operations are responsive to the needs of intended beneficiaries in all their social and cultural diversity.

In very practical terms, mixed methods improve our understanding of poverty and social exclusion. To take again the example of chapter 2 on reproductive health in Argentina, access to, or exclusion from, health care can be captured quantitatively using household surveys. But, the quality of the service provided and the perceived relationship between patient and health workers are better captured by a combination of techniques. Mixed methods also yield insights on access to, or exclusion from, less tangible assets such as social relations and social capital, or the relationship of the poor to of the justice system. Disadvantage is a complex and cumulative process whereby mechanisms of exclusion from tangible and intangible assets interact. One could argue that the very nature of poverty and social disadvantage and their interrelated causes require the use of mixed research methods. If exposure to domestic violence and abuse is in part
driven by overcrowding housing conditions, which may also affect the probability of early pregnancies, this has policy implications, in terms of the need for housing policy and programs to be in tune with health policy. Comprehensive analyses of poverty and social disadvantage lead to better assessments, which in turn give rise to different or complementary policy approaches. Of course, while qualitative methods can help to enrich areas which have traditionally been dominated by quantitative research, the reverse is also true: quantitative methods can enrich these areas which have been dominated by qualitative research. Indeed, the absence or difficulty of quantification has been a factor in the still relatively slow take up of concepts such as those of vulnerability, social capital, and social exclusion.
References


CHAPTER 2

REPRODUCTIVE HEALTH IN ARGENTINA'S POOR RURAL AREAS

Estanislao Gacitià-Mariô, Corinne Siaens, and Quentin Wodon

INTRODUCTION

Reproductive health is fundamental for improving welfare, reducing poverty and decreasing gender discrimination (Rodriguez-Garcia and Akther, 2000). Lack of control over the reproductive process increases women dependency in economic, social and political terms. The impact of reproductive health issues on poverty and quality of life is framed by the relations within the household, women's reproductive and productive work, and the income generation strategies adopted by household members (Acosta-Belén and Bose 1990; Fraad, Resnick & Wolff 1989; Kirwood 1986; Leacock 1983; Nash, 1990; Weston and Rofel 1985). To reduce reproductive health issues to a pure physical-health dimension would ignore the fact that gender roles correspond to a certain economic, social and cultural order that helps to ensure the maintenance of social relations and the reproduction of social units.

Household labor is both productive (production of goods and services for the market) and reproductive (production of goods and services for household consumption). Productive and reproductive work are two sides from the same coin as all productive work involves and requires a process of reproduction. Work can broadly be understood as labor that produces something of value for other people, which includes household or domestic work required for the reproduction of the workforce and wage-work (Gerstel and Gross, 1987; Hartman, 1987; Mann, 1990). In all societies gender is the primary means of determining the division of labor and responsibilities for their members. Being male or female is a biological fact, but becoming a man or a woman is a cultural and social process (Correia, 1999). Gender analysis is thus crucial because it looks at the social scripts people are exposed to, the type of choices they see as viable and legitimate, and the cost and benefits associated with those choices (Staudt, 1994).

Women’s domestic work – particularly that related to biological reproduction - increases disproportionately in relation to other adults in the household as the number of children grows. Mothers of large families spend more time pregnant, breast-feeding, and caring for children. Besides the health risks of high fertility for the mother³, empirical evidence suggests that

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² This paper was prepared for the report “Argentina: Rural Reproductive Health” at the World Bank (2001). The collaboration of the Universidad Nacional de Santiago del Estero and the George Washington University Center for International Health are gratefully acknowledged. Comments can be sent to Egacitiumaario@worldbank.org, csiaens@worldbank.org, and qwodon@worldbank.org.

³ A 1996 report by the Ministry of Health and Social Action describes four characteristics of maternal mortality in Argentina: (i) maternal mortality is reducible in the majority of cases through technology and knowledge already available; (ii) the vulnerability of females during the reproductive period is greater due to factors associated with
children with more closely spaced siblings are at greater risk of long-term malnutrition. Frequent, unwanted, or ill-timed pregnancies can also cause emotional hardship to women and their families, and poor maternal health "drains women of their productive energy, jeopardizes their income-earning capacity, and contributes to their poverty" (World Bank, 1999). In addition to the benefits for the current generation, reproductive health improves the health and productivity of the next generation. In contributing to sustainable development through improving equity, quality of life, and economic potential, reproductive health thus confers benefits to the whole society (World Bank, 2000; World Bank, 1999; World Bank, 1998).

This paper combines quantitative and qualitative data from primary and secondary sources in order to provide a better understanding of reproductive health issues in rural Argentina. From a methodological point of view, this study analyzes the impact of reproductive health issues on quality of life as the result of economic, socio-cultural and institutional processes that affect women’s capacity to control their reproductive life and participation in society. The paper aims at: (a) identifying the knowledge, attitudes, and practices related to reproductive health of poor families in rural areas of three Northern provinces of Argentina; (b) exploring the impact of reproductive health issues on women’s quality of life, with special attention to their ability to control their fertility and increase their income generating potential; and (c) providing information and recommendations that would facilitate the discussion of policies and programs aimed at advancing poor rural women in Argentina, their productive capacity and reproductive health status.

The second section of the paper provides basic reproductive health statistics obtained from the survey conducted especially for this study (see box 2.1). The third section, which is devoted to quantitative regression-based techniques, analyzes the impact of family planning on the probability of having a delivery, and the impact of a delivery on the probability of working and the number of hours worked. It is found that lack of family planning increases the probability of a delivery by up to 15 percent (and thereby the probability of being poor since the household resources have to be share among a larger number of household members). However, the evidence of an impact of a delivery on work patterns is weaker. The fourth section provides the results of the qualitative analysis on a wide range of topics related to reproductive health. A conclusion follows.
REPRODUCTIVE HEALTH IN RURAL ARGENTINA: BASIC STATISTICS

Statistics for the survey sample

Since early childhood the women are socialized in their expected reproductive and nurturing roles, first by taking care of their siblings, and later of their own family. The women in our sample established their first union early in their lives (90 percent of the women leave their parents households by age 17) and start their reproductive life soon after, much of the times without having a good knowledge of their reproductive system or how to prevent a pregnancy, if desired. Most women suggest that their first pregnancy was not intentional. However, women see pregnancy as a way out of the parental family. In focus groups, the women indicated that the best age for having the first pregnancy is between 18 and 20 years old. However, they recognize that such assertion is based on their current experience, after having had their first pregnancy younger than what they now indicate is the best age. Women with teenage daughters mentioned they have told their daughters to wait. However, social pressure, economic reasons, and an acceptance of the role model provided by the elder generation (of their mothers) are difficult to surmount for most girls.

Regarding the use of family planning, while 51 percent of the women declare using some type of contraceptive method, only 25 percent currently use modern family planning methods. Use of family planning is higher among women that participate in social organizations (55.4 percent), and those aged 31 to 36 years old. The family planning methods most commonly used are natural family planning, which includes periodic abstinence, temperature, the rhythm method (50 percent) and the birth control pill (45 percent). Half of the women who declare using some family planning method are using "natural" methods. This reflects a resistance that women face from their partners to use modern methods. Also, it shows that access to modern methods is limited. When women use "natural" methods, they are exposed to the permanent risk of undesired pregnancies because they do not have control over sexual relations.

Only nine percent of the women declared that their partners use condoms despite the fact that knowledge of condoms is high, at respectively 92 percent, 63 percent and 55 percent in the provinces of Misiones, Salta, and Santiago del Estero respectively. The difference between Misiones and the other two provinces is probably a result of the AIDS educational program that is being implemented in Misiones. The women state that the men accept certain family planning methods more than others, and they believe that the men prefer the women to use family planning rather than themselves. The men declare that it is important to be relaxed and not to worry about contraception when having sex. Because of these attitudes, both the men and the women feel that contraception is mainly a female responsibility.
Chapter 2: Reproductive Health in Argentina’s Poor Rural Areas

Box 2.1: Quantitative Analysis: Survey, Basic Statistics, and Econometric Models

This paper is based on a combined quantitative and qualitative analysis of a household survey, focus groups and in-depth interviews. For the quantitative analysis, a multi-stage cluster sample of 300 rural households (1,973 individuals, 52 percent women, 48 percent men) from districts that have at least 50 percent of households with unsatisfied basic needs (NBI) in three provinces of Northern Argentina (Missiones, Salta, and Santiago del Estero) was selected. This box presents selected socio-economic characteristics of the households interviewed in the survey. In this section, we focus on a description of reproductive health statistics obtained from the survey, and a comparison of these basic statistics with similar data available for urban Argentina and the rural areas of other Latin American countries.

Basic Statistics for the survey sample

Poverty. The survey data do not include good income indicators, but other indicators can be used as proxies. According to an index of unsatisfied basic needs taking into account the physical infrastructure of the household, crowding, and access to services, many of the households are poor. Another useful indicator is mean food expenditure. At US$ 1,454 per year per household (US$ 241 per capita), it is comparable with the food expenditures for the lowest quintile of Argentina’s rural population in Salta and Misiones (World Bank 1997). If food expenditures are adjusted to reflect own production and consumption on the farm (the adjustment factors are based on Amadasi and Neiman 1998), they increase by a third, but still remain low.

Education. On average, the women have completed 6 years of schooling (7 years for men). While they report an ability to read and write, only one fifth have gone beyond 6th grade (primary education) and 4 percent have completed secondary education. Importantly, the women with 3 or less years of education have 4.12 children on average, versus 2.55 children for those with completed secondary education.

Work. Women are involved in household work (primary activity for 70.7 percent of the women) and subsistence farming (secondary activity for 54.1 percent of the women), and to a lesser extent in wage work and other micro-entrepreneurial work. This indicates that while household work remains the main activity declared by the women, their productive role is broader. The degree to which women participate in wage-earning or income-generating activities is indicative of the socioeconomic position of households. Among better off households, women's participation in wage work is lower than that among low income households. Among the 51 women with wage work as primary or secondary activity, 80 percent are from households in the two lowest quintiles of per capita food consumption.

Health insurance. Only 25 percent of the households have health insurance coverage, and two thirds of those with health insurance do not use it for reasons such as inability to make the co-payment and lack of and/or inability to pay for transportation. By contrast, in Argentina’s urban centers 52.2 percent of pregnant women were covered by private insurance or an Obra Social in 1997 (SIEMPRO/INDEC, 1997).

4 The sample is representative only of poor rural households for the three selected provinces. Key parameters (food expenditures and education level by sex, among others) estimated for the sample are consistent with the figures estimated for other large samples of poor rural population in Salta and Misiones.

5 In these three provinces, the share of rural population is well above the national average. Two of the provinces concentrate more than half of the total number of small farmers in the country (estimated at 180,000). Farm structures in Argentina are highly unequal, and it is also the case for these provinces. According to the Agricultural Census of 1988, farmers below 50 ha (50 percent) owned less than 2 percent of the land, while large farms, over 5,000ha (1.7 percent) owned almost 50 percent of the land. The differences are even more striking for the three provinces in the study where on average farmers below 50 ha (60 percent) posses less than 1 percent of the land.
While not all women in our sample were pregnant at the time of the survey, this suggests large disparities in coverage between poor rural women in the sample and the national average. Since most of the women interviewed (and their male partners) were self-employed, they did not have a compulsory social health insurance (Obra Social Obligatoria). Neither do they have voluntary insurance. This is frequent in rural Argentina among small farmers and minifundistas (see Amadasi and Neiman, 1998), particularly among the poorest groups (such as in this case), which cannot afford health insurance.

**Housing.** While most households own their house (72.3 percent), dwellings are made of adobe and brick (64 percent), with compacted soil floors (70 percent) and cardboard, straw, wood or tin sheets ceilings (85 percent). Many households have latrines, but only 10 percent have a toilette inside the home, and 14 percent running water. Less than half of the households (46 percent) are connected to the electric grid. One in two dwellings has either one or two rooms and 80 percent have no more than three rooms. Crowding is severe, with on average three persons per room, and often, one single bedroom is shared by all household members with little or no privacy.

**Econometric models**

**Impact of contraception on delivery.** The determinants of contraception and delivery are analyzed using a bivariate probit model. Using bivariate probits generates efficiency gains in the estimation because the correlation between the error terms of the contraception and delivery regressions is taken into account. It also enables us to compute the probability of having a delivery conditional on using contraception or not. Denoting by $D^*$ and $C^*$ the latent and unobserved continuous delivery and contraception variables, by $D$ and $C$ their categorical observed counterparts, and by $X$ the vector of independent exogenous variables, the bivariate probit model can be expressed as:

\[
D^* = \beta_D'X + \varepsilon_D \\
C^* = \beta_C'X + \varepsilon_C \\
E[\varepsilon_D] = E[\varepsilon_C] = 0 \\
Var[\varepsilon_D] = Var[\varepsilon_C] = \sigma^2 \\
Cov[\varepsilon_D, \varepsilon_C] = \rho
\]

The impact of using contraception on the probability of delivery is computed as the difference in the two conditional probabilities of delivery: \( \Delta P = P(D=1 | C=0, X) - P(D=1 | C=1, X) \)

**Impact of delivery on work patterns.** To estimate the impact of family size on the women’s income generating potential, we could in principle estimate the loss in earnings per capita or in wages due to delivery, but this is not feasible here due to the low quality of the wage data and the small sample. As an alternative, we estimate the impact of a recent delivery on the probability of working through a standard probit regression, as on the number of hours of work through a standard tobit regression.

**Source:** Authors.
The age for women interviewed ranges from 16 to 65 years, with a mean of 32. For their male partners the range is from 21 to 67 years and the mean is 38. About 85 percent of the women are in reproductive age. One fifth are 24 years old or younger, and only 5 percent are above 50 years. While the average age for the first pregnancy is 18 years old (the mode is 17 years old), about 54 percent of the women become pregnant before 18 and 16 percent under 15 years old. Adolescent pregnancies are not an exception but a common fact and, in a way, an expected passage, a way out of parental control. However, incest was mentioned as a cause of very early pregnancies in focus groups as well as in the in-depth interviews. Housing conditions may contribute to incest, because crowding is severe, with on average three persons per room, and often, one single bedroom is shared by all household members with little or no privacy. This issue was identified in focus groups as a key factor in the sexual initiation and the early expulsion of children and youth from the house (similar findings are found in Barone, 2000 and Fogel et al., 1993 Fogel and Pantelides, 1994)\(^6\).

The oldest woman having a first pregnancy among the group studied was 37 years old. The average age for the last pregnancy was 29 years old. About 40 percent of the women had children after age 30 and 5 percent over age 40 (some up to age 46). The average total number of pregnancies is 4.86 per interviewee. There is a significant negative correlation between educational attainment of women and age of last pregnancy. An important factor for late pregnancies is the establishment of new relationships. Most women feel that after establishing a relationship with a new partner, they have to “give” him a child. The range of pregnancies goes from a minimum of 1 to a maximum of 14 pregnancies per woman. It is likely that through breastfeeding the women manage to prevent a higher number of pregnancies. Also, if they devote an average of two years for child rearing for each offspring, this may again limit the number of children. The women have from 1 to 11 children. As a result of the high fertility rates, the share of population under 14 years old (53 percent) is higher than the national average (30 percent) despite the fact that the share of the population aged 20 to 59 is lower (35.1 percent) than the national average (43.6 percent). This may also suggest out-migration of the economically active population, starting at age 15 to 19.

Most women are married or cohabiting (83 percent). However, only 16 percent of the households are female headed. Female headed households have more children on average (4.7) than male-headed households (3.7). The dependency ratio (i.e., number of members aged 14 or less or 65 and older divided by number of adults aged 14 to 64) is 1.41 on average, 1.71 for female-headed households, and 1.35 for male-headed households. One in four women declares that her children are all from the same father. From those with children from more than one man, 89 percent mention two fathers and 10 percent more than two fathers. Among women with children from more than one man, just 8 receive alimony or support from their former partner(s). Most of the interviewees (76 percent) are Catholic, followed by Evangelists (17 percent).

Half of the women (53 percent) indicate that the decision to use family planning is made by the couple, and one out of four says that it is the woman who decides. In focus groups, there was

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\(^6\) Early pregnancy may set in motion an intergenerational cycle of ill health and growth failure (World Bank, 1994). Studies conducted in Argentina by Pantelides and Cerrutti (1992) and Pantelides (1995) found higher rates of adolescent pregnancy among girls with less formal education. Other risk factors for early pregnancy included: (i) having had a parent who had his/her first child before the age of 20; (ii) having a sibling who had become an adolescent mother; (iii) having had a parent, particularly the mother, absent from home (see also Correia, 1999).
consensus that women are generally responsible for choosing family planning methods because of the implications pregnancy has on their bodies and lives in general. Men, in general feel that they were not responsible, while at the same time they are not in agreement with their women taking the decision to use forms of family planning other than “natural methods”. In spite of the discourse regarding joint decision making, woman must make the decision to use contraceptives because men won’t. This is evident in the low utilization of barrier methods such as the condom (10 percent) in which men take responsibility.

Women with less than 6 years of education indicate more frequently (34 percent vs. 26 percent for women with more than 6 years of education)) that there is no conscious decision to have children. Among Coya (indigenous) women in the province of Salta, regardless of their educational level, there is a significantly larger proportion of women (63 percent) that respond that pregnancy is a decision of the couple (only 18 percent indicate that children just come). The results about the reproductive health behavior of Coya women should however be interpreted with caution because of the small size of the sub-set of Coya women in the sample and to high degree of assimilation of Coya communities in Salta.

The prevalence of forced sexual relations among the women interviewed is reported to be about 21 percent, though the actual percentage may be higher as these situations tend to be under-reported. Of the women who reported at least one episode of forced sexual relations, 80 percent had told her partner “no.” In cases where women had verbally declined to have sex, only one of five male partners expressed understanding of the situation. Forty-five percent of men proceeded with having sex against the woman’s will and 31 percent of men reacted with violence. One in three women declares having been subjected to violence due to the refusal to have sex. In addition, another 15 percent acknowledge the occurrence of domestic violence. More than half of these women (59 percent) indicate that alcohol is one of the most important factors in domestic violence and abuse. Twenty-two percent also identify men’s feelings of anger or jealousy as reasons for domestic violence, which may also be associated with alcohol abuse in some instances. When asked whether women should accept abuse from men, 92 percent of the women responded no. Yet the women indicate that frustrations due to lack of economic resources and/or jealousy if the man believes that the woman is seeing another man justify a violent reaction. Some of the women even indicate that some types of physical aggression are indication of care and love from the man.

One out of four (24.4 percent) women has had a natural or induced abortion at least once. The women attributed the occurrence of abortion to multiple causes that range from clinically defined

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7 Abortion is a sensitive issue in Argentina due to its legal and moral implications. The law penalizes both health personnel and women with incarceration of up to 4 years for performing an induced abortion. The law stipulates some exceptions, such as life threatening situations endangering the life of the mother and in cases involving rape of a mentally disabled woman. In spite of the legal sanctions against induced abortion there is evidence that women, particularly those from lower socioeconomic echelons, resort to clandestine abortion in dealing with unwanted pregnancies (Felder and Oszlak, 1998; Ramos and Romero, 1998, Ramos et al. 1997). Different estimates (Ramos and Romero, 1998) suggest that between 335,000 and 500,000 abortions are performed yearly in Argentina, or about one every 16 to 24 women in reproductive age. According to recent research on the subject of abortion (Ramos and Romero, 1998) in Argentina, illegal abortion services are diversified and segmented by economic status. Poor women have only access to clandestine abortions performed in poor conditions by various means. Abortion (or their complications) are responsible at least for about 32.4 percent of maternal deaths and is the second cause of maternal mortality.
conditions such as ectopic pregnancy (9.7 percent) and complicated delivery (8.1 percent) to poorly defined (2.7 percent) and unknown (10.8 percent) causes. Only 2.7 percent of women openly admitted that they did not want the pregnancy. However, other causes of abortion such as excess of physical activity (6.8 percent), use of contraceptives (4.1 percent), trauma (27.0 percent), and uterine bleeding (13.5 percent) may have an inferred association with induced abortion (Ramos and Romero 1998). Thus up to 60 percent of the causes for losing a pregnancy may have been the result of an induced abortion. This represents 16 percent of the overall sample, which is high considering that estimates for Argentina indicate that no more than 10 percent of the women in reproductive age go through an induced abortion.

Half of the women do not receive postnatal care after delivery. One fourth receive one check-up, and another fourth attend more than one postnatal care visit. Almost all women breastfeed their children, yet the probability of breastfeeding for more than six months is lower among women who declare wage work either as their primary or secondary activity, regardless of their educational level. Women who do not declare to wage work tend to breastfeed their children until the baby is entirely weaned or the woman cannot continue breastfeeding. As women age, the length of breastfeeding decreases only slightly. Most women breastfeed on-demand as the child is with them while they perform daily tasks. For many women, breastfeeding operates as a family planning method. Nevertheless, the long breastfeeding period in which women engage in represents a severe toll on their time as well as on their bodies. Women indicated that breastfeeding results in their seeing the first changes in their bodies after pregnancy, which in some extreme cases could end up in clear physical weakening, including in some cases losing teeth.

Women’s health status was assessed by asking for the occurrence of illness during the four weeks prior to the interview. Of those women who answered positively (36.2 percent), only 77 percent had sought health care. Women tend to minimize their health problems. They see their poor health status as the norm. Women’s perception of their health in general is also associated to the fulfillment of their productive and reproductive tasks. If the illness does not severely impede her from performing in the short term her responsibilities she does not consider herself to be “sick”; rather it is just “not feeling well”. Of those women that were ill, about 50 percent continued carrying on with their daily activities as usual, 20 percent indicated that were unable to do all their daily activities for two or three days and, only 25 percent of the ill women declared that they were impaired for more than three days.

Only one in four women that reported to be ill during the last four weeks received some type of treatment. Of those that sought care, one out of two went to the public sector for services, while 20.7 percent were treated at home. In the survey, the women’s assessment of the quality of health services they received is good for 56 percent and very good for 26 percent of respondents. However, women indicated in focus groups that they often feel mistreated at public hospitals, particularly when the reason for the consultation refers to reproductive health. This dichotomy between the assessment of the quality of service registered using a close scale (survey) and the open ended format of the focus groups suggests that women’s perception of their health and the services they get cannot be assessed only by asking them to rank the quality of service in a point scale. Rather, it is required to give women the opportunity to express in their own words how they felt about the services. Besides this methodological problem, the results indicate that the
women have low expectation levels regarding quality of services. Women indicated that they cannot afford a better service because they are poor and, thus, had no other option.

**Comparing the survey sample to other data sets**

According to a 1996 report by the Argentinean Ministry of Health and Social Action, the reproductive health profile of Argentina is worrisome and precarious due to specific economic, social, cultural, and institutional factors (Gogna et al., 1998). These include the low social status of women; the sexual division of labor and lower pay for women; lack of reproductive health services, including family planning for both men and women; lack of insurance coverage, day care, and preventive health services, particularly cancer and Sexually Transmitted Diseases screening; and lack of social services dealing with domestic violence and other situations of abuse and neglect. As compared to this diagnosis, which is valid for the nation as a whole, the situation in poor rural areas is even more serious. In rural areas, the lack of support, poor access to health services, and domestic violence results in multiple reproductive health-related conditions that impair rural women’s well being and contribute to their social exclusion. In this section, we provide data to help situate the basic statistics provided in the previous section in the Argentine and Latin America context. There are clear disparities between urban and rural areas in reproductive health statistics, such as the percentage of births attended by a health professional, which is 96 percent for the nation, yet 75 percent for the rural areas nation-wide. The maternal mortality rate reaches up to 65 per 100,000 live births in rural areas, compared to 48 for the whole nation. The women in the northern provinces of Argentina have a general mortality rate approximately 4 times higher than the men. While these provinces have only 20 percent of live births, 25 percent of the total infant mortality and 38 percent of maternal mortality are concentrated there (OPS/OMS 1999.) A study by Bortman et al. (1999) examining the relationship between gender, premature mortality, and low income found in 1999 that rates of premature mortality are highest in the poorest provinces of the nation. Premature mortality in these regions was found to be much greater among female population than among male population. A comparison of selected reproductive health indicators from the survey sample and nation-wide data for poor urban women (table 2.1) suggests that there are significant differences between poor urban and rural women regarding reproductive health behavior which cannot only be attributed or explained by their economic status relative to their location. That is, poor rural women have worst indicators than poor urban women.

### Table 2.1: Reproductive Health Indicators for Poor Rural and Urban Women in Argentina

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Poor rural women in survey sample</th>
<th>Poor urban women in country statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age of first pregnancy</td>
<td>18.2</td>
<td>19.5</td>
</tr>
<tr>
<td>Pregnancies in women age 18 and under (percent)</td>
<td>54.2 %</td>
<td>43.1 %</td>
</tr>
<tr>
<td>Use of modern family planning methods (percent)</td>
<td>25.3 %</td>
<td>47.8 %</td>
</tr>
<tr>
<td>Average family size</td>
<td>6.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Number of children</td>
<td>3.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Single female headed households (percent)</td>
<td>16.0 %</td>
<td>19.4 %</td>
</tr>
<tr>
<td>Health insurance coverage</td>
<td>24.7 %</td>
<td>42.0 %</td>
</tr>
<tr>
<td>Pre-natal care (percent of women with one or more control)</td>
<td>92 %</td>
<td>96.5 %</td>
</tr>
</tbody>
</table>


Adolescents, individuals from the lowest socio-economic levels, and rural populations are among those with the most limited access to family planning services. In the province of Santiago del
Estero, it has been reported that family planning services are not available at rural health posts. Although one of the most popular forms of contraception among Argentinean women, the birth control pill costs approximately US$ 5 per month, making it inaccessible to the majority of rural, poor women. A study conducted in Argentina by Pantelides et al. (1995) showed that more than 40 percent of all adolescents surveyed used no form of birth control, with 25 percent of adolescent females abstaining from the use of contraception due to a wish to become pregnant. More generally, table 2.2 compares reproductive health indicators between our sampled rural population and rural poor households in other Latin American countries. The data presented provided sample statistics for the bottom two quintiles of the income or wealth distribution in each country. The results suggest that rural households in our sample are doing better in most cases than rural households in the first quintiles of other countries for several indicators (including prenatal care, place of delivery, knowledge of AIDS). However, this does not hold for family planning since the value for Argentina in our sample is only marginally above the mean value for the other countries. That is, table 2.2 suggests that by international standards access to family planning services remains irregular in Argentina (Stout and Dello Buono 1996, Subsecretaria de Programas de Salud 1997). We focus on family planning and contraception in what follows.

Table 2.2: Rural reproductive health indicators for bottom two quintiles, selected countries

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>Haiti</th>
<th>Nicaragua</th>
<th>Bolivia</th>
<th>Guatemala</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q1</td>
<td>Q2</td>
<td>Q1</td>
</tr>
<tr>
<td>Prenatal Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor/nurse</td>
<td>63.4</td>
<td>84.7</td>
<td>44.3</td>
<td>58.5</td>
<td>46.3</td>
</tr>
<tr>
<td>Doctor</td>
<td>41.7</td>
<td>72.7</td>
<td>18.5</td>
<td>23.1</td>
<td>27.4</td>
</tr>
<tr>
<td>Nurse</td>
<td>21.7</td>
<td>12.0</td>
<td>25.8</td>
<td>35.4</td>
<td>37.9</td>
</tr>
<tr>
<td>Two or more</td>
<td>66.0</td>
<td>65.7</td>
<td>43.3</td>
<td>53.4</td>
<td>60.1</td>
</tr>
<tr>
<td>Place of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>35.7</td>
<td>74.3</td>
<td>1.9</td>
<td>3.7</td>
<td>29.8</td>
</tr>
<tr>
<td>Private</td>
<td>3.5</td>
<td>14.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Home</td>
<td>59.6</td>
<td>11.7</td>
<td>97.5</td>
<td>95.1</td>
<td>68.5</td>
</tr>
<tr>
<td>Use of (contraception)</td>
<td>32.9</td>
<td>37.2</td>
<td>5.0</td>
<td>7.0</td>
<td>39.6</td>
</tr>
<tr>
<td>HIV knowledge</td>
<td>56.0</td>
<td>69.7</td>
<td>Na</td>
<td>Na</td>
<td>56.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Dominican Republic</th>
<th>Paraguay</th>
<th>Colombia</th>
<th>Peru</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q1</td>
<td>Q2</td>
<td>Q1</td>
</tr>
<tr>
<td>Prenatal Care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor/nurse</td>
<td>95.9</td>
<td>96.3</td>
<td>69.5</td>
<td>79.5</td>
<td>61.1</td>
</tr>
<tr>
<td>Doctor</td>
<td>94.3</td>
<td>97.9</td>
<td>13.3</td>
<td>20.0</td>
<td>57.3</td>
</tr>
<tr>
<td>Nurse</td>
<td>1.6</td>
<td>0.3</td>
<td>56.2</td>
<td>59.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Two or more</td>
<td>92.9</td>
<td>97.0</td>
<td>77.6</td>
<td>81.8</td>
<td>57.4</td>
</tr>
<tr>
<td>Place of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>82.5</td>
<td>79.8</td>
<td>19.8</td>
<td>23.0</td>
<td>40.8</td>
</tr>
<tr>
<td>Private</td>
<td>4.4</td>
<td>16.5</td>
<td>4.7</td>
<td>6.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Home</td>
<td>12.2</td>
<td>2.9</td>
<td>74.5</td>
<td>68.8</td>
<td>56.4</td>
</tr>
<tr>
<td>Use of (contraception)</td>
<td>50.4</td>
<td>63.1</td>
<td>20.3</td>
<td>24.9</td>
<td>42.4</td>
</tr>
<tr>
<td>HIV knowledge</td>
<td>81.5</td>
<td>90.2</td>
<td>Na</td>
<td>Na</td>
<td>60.0</td>
</tr>
</tbody>
</table>

*Source: Own survey for Argentina; Gwatkin et al. (2000) for other countries. All figures are percentages. The quintiles are defined by wealth rather than by income.*
QUANTITATIVE ANALYSIS: CONTRACEPTION, DELIVERIES, AND WORK PATTERNS

Impact of contraception on the probability of a delivery

Poor households need to pull multiple income flows together to secure their livelihood. Thus, women from poor households are more likely to have wage employment or other types of work. At the same time, the poorest households are larger and women have to take care of more children, which decreases their ability to seek full time employment, as they are forced to combine productive and reproductive tasks overwhelming their physical and mental capacity to cope. In this section, we use regression analysis to analyze the impact of contraception on the probability of having a child in the last three years, and the subsequent impact of a delivery on the probability to work and the number of hours worked. The methodology is presented in box 2.2 and the regression results are presented in table 2.3. The main findings are as follows:

- **Education:** Women who have more than seven years of schooling have a higher probability of using modern contraception and a lesser probability of delivery. This result is interesting because the average number of years of education in the sample is 6.3 years and other studies of rural areas suggest that a significant number of women do not go beyond primary school (6th grade). The education of the spouse does not have a similar impact on the use of contraception and deliveries.

- **Religion and ethnicity:** perhaps surprisingly, there is a higher probability of using contraception among Catholics. However, the data do not indicate that religious affiliation has an impact on the probability of delivery. There is a higher probability of using modern contraceptive methods among indigenous Coya women.

- **Poverty (as measured by food consumption) and health insurance:** When food consumption per capita is higher (that is, when the household is richer), the probability of having children decreases. This result is compatible with the general idea that poor people have more children. However, economic status does not affect the probability of using contraception. The data also indicate that there is a higher probability of delivery over the last three years among those women that have access to health insurance. However, as expected, health insurance has no impact on the use of contraceptive methods.

- **Regional effects:** Living in Misiones increases the probability of using family planning and lessens the probability of having a delivery over the past three years. This may reflect the fact that Misiones is the only of the three provinces in which there has been a reproductive health program in place.

- **Age and previous pregnancies:** As expected, having older children reduces the probability of delivery, while having babies increases it. Also as expected, younger women are more likely to deliver.
### Measurement and Meaning

Table 2.3: Impact of Family Planning on Delivery in Last 3 Years, Rural Argentina, 2000

<table>
<thead>
<tr>
<th>Probability of delivery in the last 3 years</th>
<th>Probability of using modern contraception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>Std.error</td>
</tr>
<tr>
<td><strong>Misiones</strong></td>
<td>-1.03**</td>
</tr>
<tr>
<td><strong>Salta</strong></td>
<td>0.60</td>
</tr>
<tr>
<td>Number of babies above three</td>
<td>0.63*</td>
</tr>
<tr>
<td>Number of babies squared</td>
<td>0.02</td>
</tr>
<tr>
<td>Number of children (from 6 to 14)</td>
<td>-0.69**</td>
</tr>
<tr>
<td>Number of children squared</td>
<td>0.09</td>
</tr>
<tr>
<td>Number of adults</td>
<td>-0.15</td>
</tr>
<tr>
<td>Number of adults squared</td>
<td>-0.02</td>
</tr>
<tr>
<td>No spouse</td>
<td>-1.36</td>
</tr>
<tr>
<td>Married</td>
<td>-0.81</td>
</tr>
<tr>
<td>Cohabitating</td>
<td>-0.84</td>
</tr>
<tr>
<td>Literate</td>
<td>-1.25*</td>
</tr>
<tr>
<td>Years of school of the woman: 4 to 6</td>
<td>0.20</td>
</tr>
<tr>
<td>Years of school of the woman: 7</td>
<td>-0.67</td>
</tr>
<tr>
<td>Years of school of the woman: &gt; 7</td>
<td>-1.48**</td>
</tr>
<tr>
<td>Years of school of the spouse: 4 to 6</td>
<td>-0.13</td>
</tr>
<tr>
<td>Years of school of the spouse: 7</td>
<td>-0.30</td>
</tr>
<tr>
<td>Years of school of the spouse: &gt; 7</td>
<td>-0.90</td>
</tr>
<tr>
<td>Between 21 and 25 years old</td>
<td>-0.49</td>
</tr>
<tr>
<td>Between 26 and 30 years old</td>
<td>-1.10</td>
</tr>
<tr>
<td>Between 31 and 35 years old</td>
<td>-2.00**</td>
</tr>
<tr>
<td>Between 36 and 40 years old</td>
<td>-2.24**</td>
</tr>
<tr>
<td>Between 41 and 45 years old</td>
<td>-3.39**</td>
</tr>
<tr>
<td>More than 45</td>
<td>-4.67**</td>
</tr>
<tr>
<td>Wage of the spouse</td>
<td>0.54</td>
</tr>
<tr>
<td>Birth migration (more than 100 Km)</td>
<td>0.00</td>
</tr>
<tr>
<td>Catholic</td>
<td>0.22</td>
</tr>
<tr>
<td>Indigenous</td>
<td>-0.21</td>
</tr>
<tr>
<td>Colla</td>
<td>-0.89</td>
</tr>
<tr>
<td>Criolla</td>
<td>0.56</td>
</tr>
<tr>
<td>Other ethnic identity</td>
<td>-0.95</td>
</tr>
<tr>
<td>Is the one who manages money</td>
<td>-0.31</td>
</tr>
<tr>
<td>Visits family at least every two weeks</td>
<td>-0.58*</td>
</tr>
<tr>
<td>Visits friends at least every two weeks</td>
<td>-0.15</td>
</tr>
<tr>
<td>Goes to town at least every two weeks</td>
<td>0.13</td>
</tr>
<tr>
<td>Thinks she has a good health</td>
<td>0.00</td>
</tr>
<tr>
<td>Knows about HIV transmission</td>
<td>-0.32</td>
</tr>
<tr>
<td>Is member of a religious organization</td>
<td>0.08</td>
</tr>
<tr>
<td>Has a health insurance</td>
<td>0.85**</td>
</tr>
<tr>
<td>NHJ index</td>
<td>0.07</td>
</tr>
<tr>
<td>Food consumption per capita</td>
<td>-0.03**</td>
</tr>
<tr>
<td>Closest distance from telephone</td>
<td>-0.01**</td>
</tr>
<tr>
<td>Constant</td>
<td>7.02**</td>
</tr>
</tbody>
</table>

Source: Authors' estimation. 243 observations, Wald Chi2 of 113.16. Coefficients marked with ** are significant at the 5 percent level and coefficients marked with * are significant at the 10 percent level. Province of Santiago del Estero is omitted.
As explained in box 2.2, the regression estimates presented in table 2.3 and the correlation structure between the error terms of the two regressions can be used to estimate the impact of contraception on delivery, controlling for the other characteristics identified in the regressions. Table 2.4 suggests that contraception reduces the probability of a delivery by about 11 percentage points, and this result is robust to changes in the specification of the bivariate probit regressions.

**Table 2.4: Probability of Delivery Conditional to the Use of Modern Contraception**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Sensitivity tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delivery in the last three years</td>
<td>Delivery in the last 3 years, without demographic variables in regression</td>
</tr>
<tr>
<td>Probability of delivery with contraception</td>
<td>59.69%</td>
<td>62.50%</td>
</tr>
<tr>
<td>Probability of delivery without contraception</td>
<td>71.04%</td>
<td>70.57%</td>
</tr>
<tr>
<td>Difference in probability</td>
<td>11.35%</td>
<td>8.07%</td>
</tr>
</tbody>
</table>

*Source: Authors' estimation.*

**Impact of a recent delivery on work**

Rural fertility is closely linked to a women’s socio-economic status, but the causality goes both ways. Women in rural areas and those with little education are unlikely to delay childbearing until the age of 18. A large share of adolescents give birth outside of a stable relationship, adding emotional and financial strains to motherhood. These young women have to cope without partner and/or family support at the same time that they see curtailed their ability to get the skills demanded for good jobs, thus limiting their ability to attain economic self-sufficiency (Alan Guttmacher Institute 1998). Upon the arrival of children, women often withdraw from the labor market in need of caring for the home and family. Women are forced to return to the labor market after the arrival of children if they are single mothers or if their partner is unemployed. But the decision of women or girls living in poverty to work outside of the home is also determined by the needs of the domestic unit and the life cycle phase of the family. Development opportunities for women are thus likely to reap more benefits if they take into consideration reproductive health issues. Family planning allows women not only to decide whether and when to have children (the reproductive and private dimensions of their life), but also to have better control over their participation in the labor market, other productive income generating activities and public/civic life.

Intuitively, a key factor affecting the income generating capacity of women is the number of children they have to take care of, as the reproductive activities associated to child rearing diminish the time and energy the women may have for developing new skills and embarking in income generating activities. While intuitive, this hypothesis must be tested empirically. This is done in table 2.5 which provides an analysis of the determinants of the probability to work and the number of hours worked (for details on the methodology, see box 2.2; we did not analyze the determinants of wage earnings because the data on wages did not appear to be of good quality; the data on hours worked is of better quality).
According to table 2.5, better educated women are more likely to work, and they also tend to work more hours per week. Similarly, healthy women (i.e. who perceive their health as good) work more hours. Migration (i.e., being a woman living at more than 100 kilometers from her birth place) is also associated with a higher probability of working and working more hours. As expected, not having a partner or spouse increases the probability of having wage work. There is a negative correlation between being indigenous (Coya) woman and having wage work. Older women are more likely to work, and to work for longer hours. This suggests that young women encounter more difficulties in entering the work force in rural areas, especially the poorest, less educated, less skilled youth. This finding is consistent with other studies of youth and women participation in the labor market in other countries from the region that indicate that young women, particularly poor, experience higher rates of unemployment and underemployment. More than half (53.5 percent) of the women that have wage work are 31 to 50 years old, while only 8 percent are 15 to 20 years old. This situation is worrisome since it has been demonstrated that overcoming poverty is conditioned in great measure by the possibility of gaining a second household income. One factor which may influence the women's entrance into the labor market is the high rate of adolescent pregnancies among women of lower income, but this is difficult to capture in the regressions because of the small sample size. Another element that affects young women's participation in the labor market in rural areas is the socio-cultural context that discriminates against women.

Table 2.5 suggests that women do not stop working because of a delivery, nor do they reduce the number of hours they work. The coefficient for hours worked is negative but significant only at a 30 percent level. This low level of significance could be due to sample size as well as the fact that only paid work and paid hours are considered in the analysis and only a few women had paid work. The small number of observations is a constraint to the analysis, but nevertheless the direction and magnitude of the coefficient of delivery in the hours work equation was found to be robust to different specifications. One interpretation of this (admittedly fairly weak) evidence on the impact of recent delivery on work patterns could be that poor women with large households are forced to work on more insecure labor arrangements as they cannot have full time employment. This would increase the vulnerability of women and their households as these women are more prone to take on seasonal and part-time jobs that pay less and have no benefits. If we are willing to argue that women's reproductive work (non-wage work) reduces the probability of undertaking wage work, or reduces the number of hours worked, this may have other implications as well since women's participation in the labor market has a significant impact on the amount of money they dispose. On average, women in the survey that have either as primary or secondary activity wage work manage about 35 percent (US$ 133 compared to US$ 97) more money than those who do not have salaried work.8

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8Managing more money does not automatically translate into an increase in women's status because the economic mobility of women remains linked to the income generation capacity of their partners. Also, women's identity need not change as they hold wage work because it is still attached to the fulfillment of their cultural roles as nurturers.
### Table 2.5: Impact of Delivery on Probability of Working and Number of Hours Worked

<table>
<thead>
<tr>
<th></th>
<th>Probability of Working (Probit model)</th>
<th>Number of Hours Worked (Tobit model)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Std.error</td>
</tr>
<tr>
<td>Misiones</td>
<td>0.06</td>
<td>0.33</td>
</tr>
<tr>
<td>Salta</td>
<td>0.50</td>
<td>0.36</td>
</tr>
<tr>
<td>Delivery within the last three years</td>
<td>0.06</td>
<td>0.28</td>
</tr>
<tr>
<td>Number of babies above three</td>
<td>-0.02</td>
<td>0.28</td>
</tr>
<tr>
<td>Number of babies squared</td>
<td>0.03</td>
<td>0.09</td>
</tr>
<tr>
<td>Number of children (from 6 to 14)</td>
<td>0.37</td>
<td>0.24</td>
</tr>
<tr>
<td>Number of children squared</td>
<td>-0.05</td>
<td>0.04</td>
</tr>
<tr>
<td>Number of adults</td>
<td>-0.33</td>
<td>0.28</td>
</tr>
<tr>
<td>Number of adults squared</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>No spouse</td>
<td>2.20**</td>
<td>0.92</td>
</tr>
<tr>
<td>Married</td>
<td>0.11</td>
<td>0.86</td>
</tr>
<tr>
<td>Cohabitating</td>
<td>0.37</td>
<td>0.84</td>
</tr>
<tr>
<td>Literate</td>
<td>-0.65*</td>
<td>0.37</td>
</tr>
<tr>
<td>Years of school</td>
<td>0.06</td>
<td>0.04</td>
</tr>
<tr>
<td>Years of school squared</td>
<td>0.20</td>
<td>0.24</td>
</tr>
<tr>
<td>Years of school of the spouse</td>
<td>0.11**</td>
<td>0.05</td>
</tr>
<tr>
<td>Years of school of the spouse squared</td>
<td>-0.26</td>
<td>0.26</td>
</tr>
<tr>
<td>Age</td>
<td>0.19*</td>
<td>0.11</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Birth migration (more than 100 Km)</td>
<td>0.50*</td>
<td>0.29</td>
</tr>
<tr>
<td>Catholic</td>
<td>-0.34</td>
<td>0.27</td>
</tr>
<tr>
<td>Indigenous</td>
<td>-0.30</td>
<td>0.26</td>
</tr>
<tr>
<td>Colla</td>
<td>-0.89**</td>
<td>0.44</td>
</tr>
<tr>
<td>Criolla</td>
<td>-0.39</td>
<td>0.27</td>
</tr>
<tr>
<td>Other ethnic identity</td>
<td>-0.91</td>
<td>0.56</td>
</tr>
<tr>
<td>Thinks she has a good health</td>
<td>0.41*</td>
<td>0.23</td>
</tr>
<tr>
<td>Per capita food consumption</td>
<td>0.02**</td>
<td>0.01</td>
</tr>
<tr>
<td>Constant</td>
<td>-5.84**</td>
<td>2.16</td>
</tr>
<tr>
<td># observations</td>
<td>262</td>
<td></td>
</tr>
<tr>
<td>Pseudo R squared</td>
<td>0.26</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Authors' estimation. Coefficients marked with ** are significant at the 5 percent level and coefficients marked with * are significant at the 10 percent level. Province of Santiago del Estero is omitted. The number of hours worked includes only paid work as a principal activity (due to limitations in the survey questionnaire).
QUALITATIVE ANALYSIS: OBSTACLES TO CONTRACEPTION AND REPRODUCTIVE HEALTH

**Conceptual framework**

Among small farmers, woman's productive and reproductive roles are essential for the maintenance of the household unit (Babb 1990; Deere, 1982; Friedmann 1986; Gonzalez and Salles 1995; Mann 1990). The household is the basic unit where sexual division of labor takes place. As a result, a hierarchical household structure emerges, where even sexuality becomes an asset subject to control. The way in which the production of goods and services needed for exchange is organized shapes gender relationships. Men achieve upward mobility through their work, while women's social mobility is linked to the fulfillment of their culturally defined role as nurturers (Acker, 1990; Kelly-Gadol, 1987).

While women have both reproductive and productive roles, women often do not have the same possibilities than men to participate in the public sphere of social and political life (Acosta-Belen and Bose 1990; Deere 1982; Gonzalez and Salles 1995; Jelin, 1990). Although women are increasingly left alone to care for the family, the children, and the farm, the pervasiveness of patriarchal social constructs in most rural communities difficult women's participation and capacity to control their own lives. Even single female-headed households tend to reproduce similar practices and are bound by social relations that maintain women's subordination.

Gender roles among rural, poor Argentinean families do not depart much from the above and may be characterized as fairly rigid, with the female partner being responsible only for some productive and social reproductive activities (Barone, 2000; Schiavoni, 1996). Gender roles are so imbedded in rural culture in Argentina that even when the husband is away for some considerable time, women tend to identify the husband as the head of the household (Schiavoni, 1996). When rural women establish domestic partnerships (either through marriage or common agreement), they generally become responsible for the daily domestic/reproductive activities of the family, and for activities in subsistence agriculture, such as caring for a home garden, raising animals, baking, and milling of grains (Barone 2000; L. Schiavoni 1996). Rural women may spend an average of 16 hours per day in productive and reproductive activities, and in crunch days of harvest periods, a woman's workday is increased by at least two hours.

Gender identity is defined by multiple factors that contribute to the construction of a world-view and a representation of the self in relation to others, of a gendered reality. As such, it reflects particular social, economic, cultural and institutional arrangements. Men and women play different roles in society based on their gender roles and identity. The identity of a group defines its capacity for accessing and mobilizing resources. As such, gender identity should be analyzed as a specific manifestation self-representation strategies that refers to the power relations between men and women. However, to reduce gender identity to a pure relation between man and woman would be to ignore the fact that cultural stereotypes correspond to a certain economic and social order that consolidates a certain specialization, a division of functions and attitudes which can be mapped along two main dimensions: (i) the productive-reproductive, and (ii) the public-private continuum that split activities and responsibilities of the household members. This division shapes interpersonal relationships as well as how men and women relate to the social, economic and political spheres.
Figure 2.1 depicts the relationship and interactions between the public-private domains and the reproductive-productive roles. The figure illustrates women's activities in the context of their social roles of production and reproduction and allows to analyze how these interactions shape gender identity and reproductive behavior. The activities in the different spheres are not mutually exclusive: women play many roles which often overlap.

The survey used for this study asked multiple questions to elicit women's perception on issues related to their productive/reproductive and public/private lives. Although this has not been discussed in the previous section, the answers to these questions were later on classified and a score was assigned to each answer based on the place they occupied on both axes. Then, the scores were summarized in an index for each woman in each dimension and plotted. The results of the analysis suggest that most of the women represent themselves in the sphere of the "reproductive-private". Little variation was observed in the answers either across provinces, economic status, educational level or age of women.

Figure 2.1 Dimensions of Women's Activities and Roles

Source: Authors
Box 2.2: Qualitative Analysis — Methodology

Qualitative data was gathered through focus groups and in-depth interviews with key informants. A total of 13 focus groups were organized (6 only women, 4 only men and 3 men and women together). Female participants were all females of reproductive age with and without children. Male participants included both partners of the women and single males with and without children. Focus groups sought to identify perceptions about reproductive health including definitional issues, control over reproductive health, decision making processes, access and management of assets, access to services, and economic and social activities. A detailed guide was designed as a protocol for conducting and recording focus group sessions in order to ensure consistency in the different provinces.

In addition to the focus groups, 18 in-depth interviews (7 in Misiones; 4 in Salta and 7 in Santiago del Estero), with key informants were conducted to obtain context information, check consistency of the findings and register the views of key stakeholders regarding reproductive health issues. Informants included staff from government programs (extension agents) working on rural development; staff from government reproductive health services; rural women leaders; policy makers; school teachers, and religious leaders from different denominations at the community level.

In an attempt to comprehend how the women in the sample viewed their own identity, this study asked multiple questions to elicit women’s perception on issues related to their productive/reproductive and public/private lives. The answers to these questions were latter on classified and a score assigned to each answer based on the place they occupied two axes: (i) productive-reproductive and; (ii) public-private. A modified Delphi technique was used to code and assign scores to the women’s responses to the open-ended questions about self-identity and gender roles. Four persons codified the answers independently (3 research team members and a specialist not involved with the research team, who acted as a “control”). After the individual scores were assigned, in the case of divergence a consensus was reached regarding the coding and the related score for the answers in each axis. The scores were summarized in an index for each women in each dimension and plotted.

Finally, two consultation workshops with national level government officials, civil society representatives and academics working on reproductive health issues were organized in Buenos Aires. In these workshops the study design and, later on, the preliminary results were presented and discussed with the participants to ensure the views of local experts and policy makers were properly considered in the analysis. All data collection was completed in calendar year 2000.

Source: Authors.

What constitutes the domestic and public spheres vary from culture to culture. In the case of poor rural communities in Misiones, Salta and Santiago del Estero, the activities related to the market or to social participation are considered to belong to the public sphere and they correspond primarily to men. At the same time, the relations within the household, while they may be affected by the market, still are not defined by the market, as long as they remain within the preview of women. Despite most women are linked to the market through simple commodity production and/or through the sale of their labor force, women have little access and control of productive resources and are basically excluded from political power. The result of this situation is a common identity developed from an inherent subordinated position within the social structures. "Fulfillment" for her is only possible through her submission to reproductive and private roles. In relation to the above, the convergence of multiple mechanisms of subordination becomes crucial in the explanation of women’s position both at the household and the market. The relationship between women’s work and household strategies reduces subsistence costs and facilitates the
production of services and goods that, otherwise would require more wage labor. Women's subordinated position is the expression of the interaction between these dimensions.

Women see their sexuality and biological reproductive process divorced from the public sphere. However, this view reflects the roles assigned to women to assure the reproduction and maintenance of their families. By excluding women from certain areas of activity, the biological reproduction is left as the only sphere of self-realization and, at the same time weakens women's control over their own sexuality. Sexuality, procreation and emotions all intrude upon and disrupt the reproduction of the established institutions. Pregnancy is viewed as a fundamental event in the lives of women because it opens the way towards motherhood and their identity as women. Maternity is valued over sexuality as pleasure, because reproduction gives a woman a place in society and is the social reference allowing her to construct her identity. Therefore, pregnancy is accepted as a positive event and is socially valued despite the recognition that one of its consequences is that it increases the woman's responsibilities and work within the home. Women define themselves through motherhood. Becoming a mother is what makes a woman. At the same time, despite the great variety and importance of women's domestic and productive activities in sustaining the household, they tend to see those activities primarily as reproductive (i.e. related to the caring and maintenance of the household; that is to social reproduction). Further, even if a woman has a salaried job, that activity is subsumed under the category of the social reproduction of the household.

As has already been mentioned, a woman's social reproductive work principally consists of daily activities tied to the domestic group (cleaning the house, washing and ironing clothing, cooking, and caring for children), as well as subsistence activities (caring for a home garden and raising small animals). At the same time, women participate in commercial/market oriented activities (such as working on the family farm, selling of goods, and making handcrafts). When women have wage-work they are responsible for the household, carrying a double burden which is not usually recognized. To carry out her responsibilities, the female partner is generally assisted by other members of the household (sons, daughters, her mother). The only acceptable reasons for a woman to excuse herself from her daily responsibilities are when she is about to give birth, having generally worked until the onset of labor, or when suffering from serious health problems.

The gender identity reported by women in this study has a direct impact on reproductive health. First, women are raised to be mothers. This implies that controlling the (biological) reproductive process is important in as much as it ensures the fulfillment of the expected role. As a result, women start their reproductive lives very early because that is the main avenue for asserting their position in society. Third, the control of the reproductive process and of women's sexuality becomes privatized. Women's reproductive functions are seen as a subset of the household and, thus, subject to the dictates of men. Finally, the reproductive behavior of these women results in: (i) More children and increased time devoted to care giving and subsistence activities, (ii) a lack of preventive health behavior which leads to larger family sizes and increased health risks, and (iii) diminished capacity to control assets and generate income. In summary, the social position of these women in their communities is defined by the division of labor along gender lines (productive vs. reproductive), the construction of symbols and images that explain, express and reinforce those divisions (motherhood); and a set of social and economic norms and processes that make difficult for a new generation of women to build a different gender identity.
Reproductive health awareness

In order to be enabled to make decisions about one’s own sexuality and reproduction, minimal conditions are necessary in terms of education, access to economic assets, and health. Reproductive health is a state of physical, mental, and social well being in all matters related to the reproductive system, its functions, and processes. Reproductive health involves awareness of reproductive and sexual life, controlling disease, promoting safe motherhood and providing family planning services and fostering a better quality of life.

For both men and women in this study, the notion of reproductive health is extremely limited. The concept, in their minds, was related to the notion of health in general, revolving around the presence or absence of bodily illness requiring a visit to the physician, excluding any action or idea of prevention. When asked to attempt to verbally conceptualize the term reproductive health it was defined as “something pertaining to a woman’s health in her fertile years”. Their idea of reproductive health is organized around the knowledge of menstruation and its function in procreation, and includes both the use of contraception and the importance of prenatal check-ups in the event of becoming pregnant. Therefore, it is seen as the exclusive responsibility of women as it is related to motherhood. There was no clear sense that motherhood is linked with fatherhood. Rather it seems that men and women considered “parenthood” primarily as a female “biological” event and social construction. Both women and men associated problems with reproductive health as mainly sexually transmitted diseases (STDs); problems during pregnancy, principally regarding abortion; and tumors related to the use of modern contraceptive methods, which many believe can cause ill health.

Despite the fact that women did not possess a wide comprehension of the term, it was clear that women did have practical knowledge on certain aspects of reproductive health, particularly those regarding birth control and handling some health risks and illnesses. In a few cases, the idea was linked with improving oneself in order to have a better future. Nevertheless, both women and men demonstrate an interest in receiving information about these topics. In the focus groups, women indicated acceptance of their difficulties in exercising their sexuality and described attempts to resolve these issues, but often encountered socioeconomic barriers in doing so. To a large degree, most men and women consider that reproductive health and family planning are things that they themselves cannot control. The nature of reproduction is considered to be something “given”, which is a belief that contributes to poor family planning and the maintenance of a vicious circle of dependency and poverty. In Salta, the women stated that, “if a child comes, it comes” and it happens “without thinking about it.” Women also stated that, “there is nothing you can do about it”. At the same time women placed high value on being capable of fulfilling their reproductive role as that was the cornerstone of their identity and place in society.

Family planning

Several elements influence the decision of whether or not to use family planning. In the case of the pills, women reported that even if they had wanted to use them they would not do it because of cost. In the case of intra-uterine devices (IUD), cost and access to services were mentioned as restrictions. In the majority of cases, free supplies were not available in the local hospital, and since these women do not generally have the money to purchase supplies on a regular basis, family planning methods become inaccessible. The use of family planning is also affected by privacy issues. Women stated that the place where to get contraceptives is very important. If the
location is not private, women feel embarrassment and fear of being the subject of rumors. This is especially important in small communities. Using pills or other modern methods can be seen by men (and society in general) as an indicator of unfaithfulness. That is, men see the use of modern contraceptive methods by women as mechanisms that would allow women to "cheat" on them. In this cultural context, family planning becomes a tool of control of women by men who do not feel any responsibility vis-à-vis "motherhood." To effectively promote family planning would require to explicitly challenge accepted cultural controls such as this.

Among men, one could argue that there is a double discourse on the issue of using modern family planning methods. On the one hand, there is a general acceptance that family planning is necessary for household economic reasons. On the other hand, they see it as a responsibility of the women that should be carried out using "natural" methods. Men differentiated between two main reasons for using family planning: (i) to prevent pregnancies; and (ii) to terminate pregnancies. Among the methods to prevent pregnancies, the men distinguish two sub-types: (i) natural methods, that they prefer to use with their spouses/partners; and (ii) condom, which they associate to single men and/or their relationships with other women (besides their wives or partners). Similarly, terminating a pregnancy is seen as a last resort, mostly for single women (not their wives or daughters). While some men expressed the use of a condom to be unnatural, some women saw it as an expression of respect.

Other considerations in the decision to use family planning relate to their perceived health implications. Some women perceived modern methods as abnormal for the body because they alter the body's natural functioning and a woman's physical appearance. One of the focus group participants stated that, "it is not good to use modern methods (the pill) because your menstruation is not like always, and that means that your body is not healthy." Women make the comparison with their mothers who did not use modern methods and lived for many years. Existing beliefs are firmly routed in the women's traditional knowledge regarding reproductive issues which have been passed through generations by mothers to daughters (see Barone, 2000 and Fogel, et al 1993). Yet, family planning is a topic in which the mothers themselves generally lack precise knowledge. While women do have some basic tools to manage their reproductive life, at the same time their lack of knowledge limits the possibility of incorporating new practices. The women lack basic understanding of their bodies and reproductive systems, and as a result are misusing some of the natural family planning methods. The focus groups results also suggest that health personnel do not generally provide information on family planning methods or attempt to create a consciousness on the importance of family planning. As for the women, they fear seeking family planning consultation from health personnel because they perceive a power differential between themselves and health personnel, and they are afraid that a moral judgment will be made against them by health personnel. It can be inferred that poor rural women need more information and access to resources that would help them to redefine their gender identity and acquire more control over their bodies and reproductive processes.

**Prenatal care and abortions**

The male partners do not take part in the prenatal control or the delivery. Women tend to go with other females (kin or friends). While women see this behavior as "normal", they would like their partners to have a more active involvement as that would give them more security. In the opinion of women, the reasons for this are the lack of interest on the part of men as well as the need for
men to keep working. More generally, prenatal and postnatal care are seen as something needed only if there is a problem. Both, women and men see medical attention due to maternity as the loss of a day of work, plus the expenses associated with the visit to the care center (co-payment), and additional expenses such as transportation and meals. Pregnancy does not typically alter the domestic routine. Women work until the day of delivery. When the woman is away from the home for delivery, men often take charge of some of the household duties with the help of their daughters (if any) or other female relatives.

For legal as well as cultural reasons, induced abortions are often hidden and described as natural occurrences. In the focus groups, both men and women express disapproval of abortive practices. Nevertheless, women do accept that it is a frequent practice and that it is understandable, particularly in cases where the woman is alone, very young, or has too many children. Both men and women agree that abortion should be prevented by the use of family planning methods. However, if unavoidable, it is the responsibility of the women to decide to have an abortion. When interviewees were asked to consider themselves making a decision about whether or not to have an induced abortion, four out of five expressed being against abortion. Only 7.3 percent asserted that they would have an abortion, while 9.7 percent said that they would perhaps consider abortion. Males in general were more open to speak about abortion, but this may be primarily because they do not take responsibility for making the decisions.

Despite these findings, female focus group participants agree that abortions occur frequently in their communities and, as indicated before, about 16 percent of the women interviewed are likely to have had an induced abortion in their lives (the rate may be much higher in the sample). Despite that both abortion and women electing to have abortions are viewed negatively, there also exists an unspoken social sanction against young, single women having children. One woman characterized this by saying, “They (referring to the community) point their fingers at you.” Thus women fear double social standards. It is not seemingly to use contraception, or have abortions or have children while young and single. Yet, there are instances in which women believe abortion is justified. These include cases of sexual abuse and instances when the pregnancy is the product of incest or relations with a married man, the women are unmarried or, more frequently, in families with many children.

Sexuality, sexual abuse, and domestic violence

Women view themselves primarily in the context of motherhood and social reproduction. Sexual relations are not seen to be a dimension of self-fulfillment, even though a large number of women (73 percent) indicate that it is important to enjoy sexual relations. For women the concept of sexuality is limited to procreation and menstruation. Puberty marks the beginning of sexual activity and fertility, and acts as a rite of passage from girlhood to womanhood/motherhood throughout adolescence. Men, on the other hand, are considered to be highly sexual. Women state that sexuality is important for both men and women, though more so for men due to their highly sexual nature. Sexual education, then, is seen to be especially important for young men. Women’s perception is that men experience unlimited sexual desire, which women must satisfy whenever the man demands it of them. Women, in general, conceptualize sexual relations not as a choice, but as a consequence of couplehood in which rejection of sexual advances by the man is not possible. Most women indicate that their main source of information on reproductive health is their mother. However, the topic of sexuality is not addressed within the family unit,
even between mothers and daughters. Data from the focus groups show that sexual information is passed between brothers and sisters, neighbors, friends, and partners. Information on sexual health is also disseminated through mass media. In some cases (in Santiago del Estero), the women indicate that discussions on sexual health are conducted in secondary schools with males and females students together. In the province of Salta, community health agents conduct discussions on sexual health with groups of women. Discussions on sexuality are also organized by the church.

Women indicate in the focus groups that they are often forced to have sexual relations with their husbands. These forced relations are perceived by women to be violations and bring about feelings of strong anger and depression. One woman characterizes it as follows, "They (men) believe they have rights (to sex). The man doesn't ask the woman how she feels." Perceptions related to the ability or inability to control and respond to such violence are linked to inequalities between men and women. These cultural constructions subordinate women to men because women are economically dependent on their husbands. These constructs are so strong that in the mixed focus groups in all three provinces, women tended to remain silent on the topic of domestic violence. While men and women agree that domestic violence exists, men tended to minimize the problem of violence and sexual abuse. They argue that it is something "from the past". However, the women emphasize that they have to obey to the wishes of their husbands/partners. Shame, fear and lack of economic support are some of the factors that women mentioned prevented them from going to the doctor for treatment or from reporting incidents of violence to the police. Further, when reporting to the police, the women indicate that, in most cases, there is no sanction or even worst, the men reacts violently, aggravating the situation.

**Social Networking**

Women's participation in social organizations is low. The majority of the women do not participate in mother's groups, parent's groups, neighborhood organizations, farmers organizations, or political parties. Participation in religious organizations seems high, however, as was indicated in the focus groups, it refers more to attending service than to be involved in specific groups or activities within the church organization. Although religious groups are important sources of information and cultural norms, participation in these groups is not associated with participation in other type of social organizations. These results are consistent with the findings of a recent World Bank (2001) study on social capital in Argentina which indicates that less than 20 percent of the population participates in any form of organization, church participation being the most frequent. Women that participate in social organizations with the exception of church groups tend to be more educated and younger. Women with more than 12 years of education are more likely to participate in neighborhood organizations. However, women that participate only on religious groups tend to be older and less educated. Participation in neighborhood organizations and political parties is higher among single women. Women with

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9 A qualitative study on gender stereotypes, power relations, and risks for STDS conducted among both men and women in a low-income neighborhood in Greater Buenos Aires, Argentina, has suggested links between health/illness, sexuality, and gender (Gogna and Ramos 1998). The study found that beliefs regarding STDS and the risk of infection were strongly tinted by deeply rooted ideas regarding gender identities, gender relations, and sexual matters; and that STDS have a very special social and cultural meaning that greatly affects prevention and treatment behavior. For some women, the perceived eventual risk of being beaten or abandoned, or of losing a source of emotional or financial support, far exceeds the perceived health risk of a STD.
no children show little participation. Women in the focus groups indicated that socialization and participation in social organizations for young (never married) single women is more difficult because of social norms. On the other hand, women also indicated that the number of children represents a constraint to participation.

Although the women interviewed have interest in social participation, they lack opportunities to engage in such activities. First, the data show that women in the early years of motherhood (typically with two or three children) tend to participate less than women with older children or women without children, as they typically lack childcare options or are unable to bring their children with them. Second, community organizations do not facilitate the building of social networks that are pertinent to women. Unlike men, who typically have numerous opportunities for recreation and diverse social participation related to productive, sport, political, or other activities, women are often limited to religious organizations. This is significant for two reasons. First, the data show that women’s participation in social organizations depends to a great extent on their control of the reproductive process. Second, the results indicate that women’s participation in social networks is important for increasing awareness of economic opportunities for income generation. It may be inferred that the responsibility and time involved in raising children preclude women with children from engaging in social participation activities, as women are compelled to develop their social and productive lives around the household.

Health care and coverage

In the focus groups, both men and women agree that their biggest problem is the lack of medical coverage due to shortcomings in the health system. They state that doctor visits to their communities are inadequate; health facilities are not well equipped, there are few opportunities to make appointments, and few days of consultation. Some women indicated that regional hospitals did not have enough beds to take in all patients. Other participants talked about mistreatment at the hands of providers.

Problems with access seem to be primarily one of cost: 1) opportunity cost by losing income generation time; 2) cost of transportation; 3) availability and actual payment for services and drugs; and 4) co-payment for the few who have health insurance. The efforts to overcome these hindrances are too great given the quality of and variety of services available. This is problematic because according to national data from Argentina, early detection of pregnancy and prenatal check-ups play an important role in the prevention of maternal mortality, and health coverage is closely related to the early detection of pregnancy. When health coverage is private or is provided by an Obra Social, 87 percent of pregnancies are detected in the first trimester, and less than one percent are never detected. However, when the only health coverage available is through a public hospital, the situation changes dramatically with only 66 percent of pregnancies detected during the first trimester and 5 percent never detected (SubSecretaría de la Mujer, 2000). A similar relationship is seen regarding prenatal visits and delivery. Thus, the lack of health coverage, as found among the women interviewed, is likely to result in negative health impacts.

Women report in the survey that they tend to use regional hospitals instead of district hospitals or local health posts closer to home. This is often due to the lack of gynecologic services, as local
health posts are usually staffed with generalists only. Women have to travel long distances to reach appropriate medical attention, facing obstacles such as lack of economic resources, lack of transportation, and limited hours of operation, among others. Some women indicate that they had felt mistreated by staff in regional hospitals, who did not treat them humanely. One woman indicated that “the health personnel say anything and have things done their way, while we just have to listen quietly”. Still, overall, when services are available, the main reason for not utilizing them is their limited accessibility rather than the low quality of treatment. For the rural population, traveling large distances to public hospitals is difficult and costly, and represents an opportunity cost to the family. Some male focus group participants complained about the long distances to health facilities. Both women and men denied the importance of the curandero and traditional medicine. However, with some probing, both men and women discussed situations in which they consulted traditional practitioners/healers. The population often limits the utilization of health services to instances of diagnosed illness (i.e. every day aches and pains are self-medicated and treated either with pharmaceuticals or traditional medicines), prenatal care in the days immediately before delivery, and for the birth itself. The study population felt that the health coverage available is insufficient to meet their basic needs. The overall perception, then, is a feeling of being unprotected, without equal access to health services and good health.

CONCLUSION

There is no clear population and reproductive health policy in Argentina today. Current efforts on responsible parenthood are moving in the right direction but slowly. Without political will at the national and provincial levels to implement comprehensive reproductive health programs, the welfare of rural poor populations, particularly women, will remain precarious. A sector analysis is important for providing information for reform based on the identified needs of specific populations as well as on weaknesses on the supply side. Existing statistics are scant and the available information tends to be out-dated, based primarily on hospital mortality statistics, and managed at the provincial level with no consistent standards across provinces. There is a need to develop and/or improve Argentina’s socio-demographic-health information and surveillance system beyond the medical/biological dimension. An improved information system should include indicators not only on reproductive health (the epidemiology of and trends in high-risk fertility behavior, the performance and quality of reproductive health services, and the health, population and nutrition outcomes relevant to reproductive health), but also on productive activities (income generating opportunities for women) and the availability of social networks/support groups for women.

Awareness of reproductive health, access to services, and use of family planning methods are low in poor rural areas. The adolescent and youth pregnancy rate and the abortion rate are high. Prenatal care is inadequate and there is no evidence that post-abortion care and guidance is available or that alcoholism or domestic violence are addressed by the health system. A constant in the majority of problems affecting the population under study is the lack of reproductive health education, which keeps them in the dark as to services they could demand. More generally, this study has documented the importance that basic education has on the reproductive

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\(\text{footnote: In Misiones many prefer to use public hospitals despite the fact that public hospitals are generally farther away from their homes, because there they may receive free drugs. In this way, availability and cost of medications play important roles in the decision of where to go for health services, even more so for those without health insurance.} \)

behavior or poor rural women. Completion of the 6th grade has a significant impact on the use of family planning, family size, as well as other important behaviors that improve the family quality of live and decrease infant mortality. A key recommendation would thus be the development of adult education programs for poor rural women age 15 to 35 that have not completed their primary education. Besides improving reproductive health indicators, completing primary education would allow these women to have better chances of finding employment or developing income generating activities. A second recommendation would be to implement targeted population education activities to promote reproductive health and preventive behaviors, while recognizing the populations’ social, economic, cultural and political context. Health promotion efforts could be implemented in partnership with private sector and civil society organizations that have experience in addressing these issues and are used to work with rural populations. Additionally, until now most family planning education efforts have been directed to women alone. The focus should be broadened to include the women’s partners. The involvement of men and youth as much as women is essential for social progress when addressing issues such as gender roles, high risk behaviors, family size or domestic violence.

The health services now available are primarily pregnancy related. There is a need to revisit the current health/maternity services package so that they can meet the needs of rural poor populations for more comprehensive reproductive health services. Primary health care, as offered in both community health posts and hospitals, needs to better respond to the population’s reproductive health care needs. Our study suggests a few priorities: (i) early and complete prenatal control, including nutritional status; (ii) postpartum controls, including port-abortion care; (iii) routine breast and cervical cancer check-ups (although this has not been discussed explicitly in this paper, it is supported by the data); and (iv) family planning for women, men and youth. To increase the utilization of such health services, it will be necessary to: 1) make available the appropriate provider (e.g. physician, midwifes) and medications; 2) have providers on the premises at all times, or at least increase their presence; 3) give prompt appointments; 4) improve education and counseling of clients and how they are treated; 5) utilize extension health workers for outreach; and 6) facilitate transportation to health facilities. Decentralized and mobile services staffed by specially trained women health specialists could be an option to facilitate access. In addition, promoting health preventive behaviors (including those to address unwanted pregnancies) as well as the prevention and treatment of alcohol abuse and domestic violence is recommended. Particular attention should be given to adolescents since they are at higher risk and in greater need of reproductive health services. Teenage pregnancy increases the risk of health problems and it lowers the future socioeconomic status of women since pregnant girls often leave school.

Reproductive health cannot be divorced from broader socioeconomic and political issues that shape and are shaped by reproductive behavior. The distribution of household tasks contributes to the definition of gender identity. It reflects a complex arrangement of responsibilities that results in the creation of different types of “workers” who need each other to ensure that their needs would be met. The data reviewed in this study indicate the splitting of household labor into two components, the productive (linked to the market) and the reproductive (as an input) only reinforces the social exclusion of poor rural women. Whether women are household heads or not, they organize their behavior first and foremost in order to ensure the subsistence needs of their families. Focus groups suggest that through this process, women become ideologically circumscribed to the reproductive sphere. As a result, there is a privatization of the social life of
women, with the public sphere emerging as a space primarily for males. Social institutions contribute to a situation in which women usually have little or no bargaining power for having more control over their reproductive and productive roles or their sexuality. This is compounded by women’s low socioeconomic status which is affected by the amount of hours spent in housework activities, which increases with the addition of every child. Improving rural women’s reproductive health and quality of life thus requires an integral approach. Education to both men and women as well as access to quality reproductive health services is just one component of this strategy. Equally important are the issues of access to assets and income generation opportunities. For example, programs such as nurseries and day care centers could be developed to facilitate women’s insertion in the labor force.

Finally, poor rural women have little participation in social organizations (other than religious). There are multiple factors that explain this lack of participation, from the burden of child raising to the lack of outreach strategies aimed at increasing women’s civic engagement. Social organizations in rural areas tend to be male dominated or gender segregated. In the former, women’s interests are not being addressed, while in the latter, the focus is on tasks or issues that do not necessarily advance women’s overall well-being. To define family planning as the only or main strategy for improving the quality of life of rural poor women without proposing changes in life conditions would place women in a situation without the proper tools at their disposal. The possibility of constructing alternative or complementary identities to motherhood should go hand by hand with more equitable socio-economic changes that would promote equity and empowerment. At the societal level, the prevalent discourse regarding reproductive health issues has been constructed and accepted as legitimate. These truths have defined which are the accepted (sexual and reproductive) behaviors and the roles that each of the household members is responsible for maintaining. While male sexuality is socially permitted, female sexuality is split in a negative side related to eroticism which women is not allowed to express, and an overt (positive) side springing from its reproductive potential. Comprehensive reproductive health services and other social programs would need to address (in their design and/or implementation) issues such as this, that have a direct impact on the health of both men and women. This is doubly important given not only the lack of knowledge about reproductive health, but also the prevalent high-risk behaviors of men and women.

Women’s social exclusion is the expression of the interaction between ideological and economic dimensions. A central factor contributing to this exclusion is control over productive and reproductive processes, particularly those related to the biological reproduction of the household. The division of labor at the household level represents the interaction of specific material condition and ideological constructs that cannot be transformed without changing the conditions that support them. A key lesson from this study is that the success of a reproductive health program cannot be separated from the transformation of the socioeconomic conditions that engender women’s social exclusion. That is, the transformation of reproductive behavior requires the transformation of the social, economic and cultural arrangements that shape that particular behavior. The foundations for this change are to be found in the daily processes in which women are involved taking advantage of the multiplicity of productive and reproductive roles women display in public and private spheres. A process of communication and sharing of meanings is essential to reformulate the prevalent gender identity of poor rural women.
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CHAPTER 3
THE TARGETING OF GOVERNMENT PROGRAMS IN CHILE
Carine Clert and Quentin Wodon11

INTRODUCTION
The government of Chile has been using for many years a system for the targeting of many of its income transfers and other social programs. The system is based on the ficha CAS, a two page form that households must fill if they wish to apply for benefits. Each household is attributed a score on the basis of the ficha CAS, and this score is used to determine eligibility not only for income transfers (e.g., pension assistance and family allowances), but also for water subsidies, access to social housing, and childcare centers. At the local level, municipalities also use the form for the targeting of their own programs and safety nets. Almost a third of all Chilean households have been filling the form. Taken as whole, the programs which are targeted using the ficha CAS play a major role not only in the alleviation of poverty, but also in its prevention by enabling vulnerable households to receive or not state and municipal support.

This papers provides an assessment of the ficha CAS system using both quantitative and qualitative methods of investigation. After describing the ficha CAS system and the main income transfers and other programs which are targeted using the system, the paper uses data from the nationally representative 1998 CASEN survey to provide quantitative measures of performance for each program. Following Wodon and Yitzhaki (2000), the quantitative performance measures are based on a decomposition of the Gini income elasticity of the various programs into a targeting component which is based on who benefits from the programs and who does not, and an allocation component which captures the impact of the variability in program benefits among participants. Overall, the programs appear to be well targeted.

The good quantitative performance of the program does not mean that the ficha CAS is without any limitations. In order to look in some detail at these limitations, the paper relies on a study of the experience, perceptions and recommendations of poor citizens on the one hand and practitioners using the ficha CAS at the local level on the other hand (Clert, 2000a, 2000b). Evidence derives from a stratified survey of 88 randomly sampled households in the municipality of Huechuraba, a comparatively poor area in the Greater Santiago area and from qualitative interviews with a sub-sample of households. Evidence also derives from focus-group

11 Both authors are with the World Bank. Comments can be sent to cclert@worldbank.org and qwodon@worldbank.org. The paper was funded by the World Bank under the Chile Poverty Assessment and the Regional Study on Extreme Poverty and Social Exclusion in Latin America. Assistance from Rodrigo Castro-Fernandez and Corinne Siaens is gratefully acknowledged. The authors are also grateful for the Chilean government's comments which improved this paper. The views expressed in the paper are those of the authors and need not represent the views of the World Bank, its Executive Directors, or the countries they represent.
discussions and semi-structured interviews with professionals located in that municipality and from interviews with central government officials. The fieldwork was carried out between December 1997 and June 1998. The triangulation of household-level interviews and focus group discussions with municipal staff in Huechuraba revealed that poor households often lack information about the government programs and how to apply for their benefits. The qualitative work also revealed potential deficiencies and biases in the eligibility criteria and associated targeting methods based on the ficha CAS. While the targeting system as a whole is sound, recommendations can be made for improving its effectiveness and its fairness.

The paper is divided in four sections. Section One introduces the paper by presenting some background information on the ficha CAS and the targeted safety nets and other social programs reviewed in this paper. Section Two provides evidence for a quantitative assessment of the targeting of some of these social entitlements using the CASEN household survey data while Sections Three sheds light on the a more qualitative assessment of targeting methods, based on the experience and views of the poor themselves and of social practitioners. Conclusions and policy implications are provided in the last section.

BACKGROUND

This section first sheds light on the official means-testing instrument used by the Chilean government, the ficha CAS or CAS form. It then puts the forthcoming findings of the paper in context by presenting the key safety nets and programs reviewed in this paper and their importance in the social protection of the poor.

The Ficha CAS

Introduced during the military regime (1973-1989) and modified by the post-1990 democratic governments, the ficha CAS\textsuperscript{12} is a two page form which is used for determining the eligibility of households to a number of Government programs including not only monetary transfers (Subsidios Monetarios), but also access to low income housing and childcare centres.\textsuperscript{13} A reproduction of the form is provided in Appendix Two. The form provides detailed information on housing conditions of the dwelling unit (e.g., material used for the construction of the housing unit, number and type of rooms, access to water, latrine and sanitary services, access to electricity, etc.); on members of the dwelling unit (their occupation, educational level, date of birth, and income. Additional information is provided on material assets held by the household (housing status, television, heating equipment, and refrigerator). Points are allocated to households on the basis of the information provided, with the number of points fluctuating between 380 and 770 points. Households with a total of inferior to 500 points are considered as extremely poor and those with a total number of between 500 and 540 points are considered as poor. The Ministry of Planning MIDEPLAN is responsible for the design of the ficha CAS. The recruitment of the employees administrating the form is done at the discretion of the municipality, but training must be provided by the Ministry. Municipalities usually separate the activities of data collection and data entry from those of needs assessment. Data collection and

\textsuperscript{12} Ficha de Estratificación Social.

\textsuperscript{13} At present the official name of the form is the ficha CAS-II.
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entry tend to be done by a department of social information within the municipality, while the control of the needs assessment is usually done by social workers and técnico-sociales (welfare assistants).

The national income transfer programs which are targeted using the CAS scoring system apply the formula in a strict manner in order for determining eligibility. The score obtained by a household automatically and exclusively prevails, so that eligibility depends only on the number of points obtained. The ficha is also used for targeting locally financed safety nets, but in this case social workers and other professionals can often give some weight to other eligibility criteria such as the presence of a chronic illness, the civil status of household members, and their actual financial resources at the time of request (the ficha is completed every three years, and there may be differences between the status of households when they apply for benefits, as compared to their status when they filled the form). For housing programs as well, differences can be observed in the use of the ficha at various levels of government. Professionals dealing with central government programs (viviendas básicas and vivienda progresiva) must follow the method of calculation defined by the Ministry of Housing (SERVIU), while professionals involved in municipal initiatives have some discretionary power.

One of the advantages of using the ficha for many different programs is that this reduces the cost of means-testing. The cost of a CAS interview is about US$8.65 per household. The Ministry of Planning estimates that 30 percent of Chilean households undergo interviews, which seems reasonable given that the target group for the subsidy programs is the poorest 20 percent. The CAS system is used as a targeting instrument for utility subsidies, income transfers, social housing subsidy, and pension subsidies among other programs. Because the fixed administrative costs of targeting are spread across several programs, the CAS is very cost-effective. In 1996, administrative costs represented a mere 1.2 percent of the benefits distributed using the CAS system. If the administrative costs of the CAS system were to be borne by the water subsidies alone, for example, they would represent 17.8 percent of the value of the subsidies.

The Targeted Programs: Their Role in Fostering Security and Alleviating Poverty

Many national and local Government programs rely on the CAS system for their targeting. Locally, Comunas generate from their own budgets other safety net programs which vary in their amount and eligibility criteria, but these cannot be evaluated with the CASEN. The national programs implemented with the ficha CAS and reviewed in this paper include means-tested pensions, family allowances, water subsidies, social housing, and child care. As developed below, most of these social entitlements play a major potential role in decreasing vulnerability and alleviating poverty, which makes the issue of targeting a crucial one. Full descriptions of the programs is provided in Appendix One.

Pensions PASIS (Pensión de Asistencia): Means-tested state pensions are provided to elderly and/or disabled individuals through PASIS. To be eligible, an elderly individual needed to have a total income below half of the minimum pension allowance, which was CP$ 23,415 per month in 1998.14 The eligibility threshold for the disabled is the amount of the minimum pension allowance. While the income transfers provided through PASIS are low in comparison with

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14 In 2001, PASIS was worth 35104 Chilean Pesos.
minimum wage, household interviews in the Comuna of Huechuraba suggest that the transfers can be significant in the eyes of those who do not have any other source of income or family support to rely upon. In addition, those who receive PASIS pensions are automatically eligible for free access to public health services through the health gratuity card. By securing an entitlement to health, PASIS thus provides low income elderly and invalid or disabled people with a key mechanism of long term social protection.

Family allowances SUF (Subsidio Unico Familiar): Family allowances are important because they help in coping with the extra expenses due to the birth of children, as well as with the possibility of a reduction in earnings due to the fact that pregnant women and women who have delivered may have to stop working for a while. The loss in earnings is particularly likely for women involved in precarious jobs which do not provide them with maternal and other family benefits. The amount per child above three years of age was CP$2,500 per month in 1998, at the time the CASEN was implemented. The amount per child below three years of age was CP$2,800. Maternal benefits were also CP$2,800 per month for a period of ten months, with eligibility as of the fifth month of pregnancy.\(^{15}\)

Water subsidies SAP (Subsidio Agua Potable): The water subsidy provides an allowance for the cost of consumption of up to 15 cubic meters per month. As noted by Gomez-Lobo and Contreras (2000; see also Estache, Foster, and Wodon, forthcoming, for a review), the subsidy was introduced in 1990 to reduce the impact of rising prices after the reform of the water sector. The initial take-up of the program (i.e., the percentage of eligible households participating in the program) was low in the first year, at 5 percent only, because the eligibility threshold and the value of the subsidy were too low to make it worthwhile for households to participate. To increase take-up, water companies were given the opportunity to propose customers as potential subsidy recipients, which was in their interest in order to increase payment rates. The subsidy covers from 20 percent to 85 percent of the bill for the first 15 cubic meters of monthly consumption. MIDEPLAN uses regional data on water consumption and tariffs, as well as socioeconomic conditions, to determine the funds made available to each region. Within each region, subsidies are allocated to municipalities who then determine household eligibility using the ficha CAS. As for other programs targeted with the ficha CAS, household eligibility is re-assessed every three years, and the subsidy can be withdrawn by utilities if the household has more than three months of arrears in paying its share of the bill.

Social housing: The programs of vivienda básica and vivienda progresiva (etapas I–II) provide subsidies for the construction of new housing units, or the improvement of existing units. The amount of the subsidy is determined in UFs, which are monetary units.\(^{16}\) Apart from eligibility criteria according to the ficha CAS, the households must contribute to the construction costs and thereby provide evidence of savings when applying. The program is important not only to satisfy basic needs, but also because the lack of safe and secure shelter has been shown to reduce the ability of women to work because of their reluctance to leave their children at home (risks of

\(^{15}\) These figures refer to the period during which the 1998 CASEN survey and the micro-study in Huechuraba were implemented. The amounts have changed since. For instance, in July 2001, the SUF was worth 3452 Chilean Pesos.

\(^{16}\) In 1998, one UF was worth approximately CP$460.
accidents in sub-standard housing, such as electrical shocks). Good housing conditions are also essential for individuals involved in home-based wage employment or micro-enterprise, and for reducing crowding and the associated social risks of domestic violence.

Child care: The childcare programs of the JUNJI and Fundación INTEGRA are also targeted using the ficha CAS. The programs provide care for children whose mothers are working. Since vulnerable low-income women are more likely to be affected than men by exclusion from the labor market and by poor quality of employment, this type of program for affordable or even free childcare is important from a gender point of view and for building work experience and incentives among poor women.

QUANTITATIVE EVALUATION

This section provides a quantitative assessment of the targeting performance of the social programs which are implemented nationally and for which we have information in the nationally representative 1998 CASEN survey (Caracterización Socioeconómica Nacional) implemented by the Ministry of Planning MIDEPLAN.

There are various ways to evaluate quantitatively the targeting performance of the programs whose eligibility is based on the ficha CAS. The most common measures of targeting performance used in the literature are based on the so-called errors of inclusion and exclusion. An error of inclusion is observed when a household which is not part of the program’s target population receives the program’s benefits. An error of exclusion is observed when a household which is part of the program’s target population does not receive the program’s benefits. This approach for measuring targeting performance has been used among others by Gomez-Lobo and Contreras (2000) for Chile’s water subsidies. In this paper however, we use an alternative (and arguably better) indicator of performance which takes into account not only who benefits from social programs and who does not, but also to what extent various households benefits (the program benefits may vary from one household to another). The method is explained in box 3.1, and it relies on three key parameters for understanding the impact of various programs on social welfare:

- **Gini income elasticity (GIE):** The overall impact on social welfare of changing at the margin the budget allocated by the government to a given program is a function of the program’s Gini income elasticity (GIE hereafter). If the GIE is equal to one, a marginal increase in the benefits will not affect the Gini coefficient in after-tax after-benefit per capita income, and thereby the effect on social welfare can be considered as neutral (no change). If the GIE is less (greater) than one, then an increase in program benefits will decrease (increase) the Gini of income, and thereby increase (decrease) social welfare. The smaller the GIE, the larger the redistributive impact of the program and the gains in social welfare. Importantly, since the GIE is estimated for a dollar spent on the program, we can compare programs which are of different scale in terms of outlays.

The GIE can be decomposed into the product of a targeting elasticity and an allocation elasticity.

- **Targeting elasticity:** The targeting elasticity measures what would be the impact of a program on social welfare if all those who benefit from the program were receiving exactly the same benefit. In other words, the targeting elasticity provides the impact of pure targeting (who gets the program and who does not) on social welfare. Lower and upper bounds can be
provided for the targeting elasticity, and these bounds depend on the share of the population which participates in the program. The higher the share of participants in the population, the closer the bounds. The intuition beyond this result is that it is easier to target a program to the very poor when the share of the participants among the population is low. The practical relevance of the bounds is that they enable an analyst to compare the targeting performance of programs of different sizes.

- **Allocation elasticity:** The allocation elasticity measures the impact of social welfare of the differences in the benefits received by various program participants. Lower and upper bounds can also be provided for the allocation elasticity. The combination of the information provided by the targeting and allocation elasticities enables the analyst to assess whether the good (bad) performance of a given program is due to good (bad) targeting or to a good (bad) allocation of benefits among participants.

In the 1998 CASEN, it is feasible to estimate both the targeting and allocation elasticities for the income transfers provided by PASIS, SUF, and the water subsidies. Additionally and for comparison purposes, we also compute the targeting and allocation elasticities for another type of means-tested family allowances which is different from SUF and does not rely on the ficha CAS (according to the CASEN questionnaire, these allowances provide CP$3,025 for households with gross income below CP$91,800, CP$2,943 for households with gross income between CP$91,800 and CP$186,747, and CP$1,000 for households with gross income between CP$186,747 and CP$365,399). For the housing and child care programs, the information available in the CASEN enables us to compute the targeting elasticity only because we do not have the amounts allocated (or the cash value of the in-kind benefits), but the targeting elasticity should be fairly close to the overall GIE because there are relatively few differences in benefits allocation between households in these programs (the amounts for the housing allocations are fixed, and the child care benefits only depend on the number of young children that a working mother may have).

The results of the estimation are provided in table 3.1. To understand how table 3.1 works, let's consider the case of the pension assistance provided under PASIS. The table indicates that the GIE for PASIS is -0.58, which is fairly low and hence highly redistributive (any elasticity below one indicates that the corresponding program is redistributive; a negative elasticity implies a large redistributive impact). The GIE for PASIS is equal to the product of the targeting elasticity (-0.56) and the allocation elasticity (1.05). The fact that the allocation elasticity is close to one suggests that there are few differences in pension benefits among PASIS participants. In other words, the redistributive impact of the program comes from its good targeting based on the ficha CAS. As for the participation rate in the program of 6.1 percent, it determines (together with the value of the overall Gini for per capita income of about 0.57) the lower and upper bounds for the targeting and allocation elasticities. For comparison purposes, other sources of pension income have been included in table 3.1 even though these are not targeted through the ficha CAS and are provided in many cases by private operators. Clearly, and as expected, the pension assistance provided through PASIS is much more redistributive than other pensions.

More generally, two main conclusions can be drawn from table 3.1:

- **High overall redistributive impact, but differences between the various programs:** All the programs targeted according to the ficha CAS have a large redistributive impact per peso spent. This is evidenced by the low values of the GIE elasticities for the income transfers and
water subsidies, and by the low values of the targeting elasticities for the housing and child care programs (for these programs, we cannot compute an allocation elasticity, so that the GIE remains unknown). Yet, some programs are better targeted than others. Among income and other transfers, the SUF family allowances have the best performance, while water subsidies have a somewhat lower performance. Among the other social programs, the child care programs tend to be slightly better targeted than the housing programs, perhaps because of the savings requirements required for participation in the later.

- **Good targeting, with few differences in allocation:** The redistributive impact of the programs is due to their good targeting, which is based on the ficha CAS. The fact that the GIE tends to be close to the targeting elasticity (because the allocation elasticities are close to one) suggests few differences in the amount of benefits received from the various programs by different households. Only in the case of water do we have an allocation elasticity well below one, probably because those who consume more water and thereby receive more subsidies tend to be higher up in the distribution of income.

<table>
<thead>
<tr>
<th>Table 3.1: Gini Income Elasticity of Social Programs Targeted According to the <em>Ficha CAS</em></th>
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<tbody>
<tr>
<td><strong>Income transfer programs and water subsidies</strong></td>
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<td>Non-PASIS pensions (not targeted)</td>
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<tr>
<td>Gini income elasticity (GIE)</td>
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<tr>
<td>Program participation rate ( \rho )</td>
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<tr>
<td>Mean allocation received</td>
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<tr>
<td>Overall Gini for per capita income ( G_y )</td>
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<tr>
<td><strong>Targeting elasticity</strong></td>
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<td>Lower bound</td>
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<td>Actual value</td>
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<td><strong>Allocation elasticity</strong></td>
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<td>Lower bound</td>
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<td>Actual value</td>
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<td>Upper bound</td>
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<tr>
<td>Other targeted programs</td>
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<td>Housing Viv. Basica</td>
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<td>Housing Viv. Prog I</td>
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<td>Housing Viv. Prog II</td>
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<td>Child care JUNJI INTEGRA</td>
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<td>Child care INTEGRA</td>
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<td><strong>Gini income elasticity</strong></td>
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<td>Targeting elasticity</td>
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<tr>
<td>Lower bound</td>
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<tr>
<td>Actual value at individual (per capita) level</td>
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<tr>
<td>Actual value at household level</td>
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<tr>
<td>Upper bound</td>
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</tbody>
</table>

*Source: Authors’ estimation using 1998 CASEN survey.*
Box 3.1: Methodology for the Quantitative Evaluation

To assess the impact on welfare of government programs per dollar spent in each program, we Wodon and Yitzhaki (2000). Denote by \( \bar{y} \) the mean income in the population and by \( G \) the Gini index of income inequality. A common welfare function used in the literature is \( W = \bar{y}(1-G) \). The higher the mean income, the higher the level of social welfare, but the higher the inequality, the lower the aggregate level of welfare. This welfare function takes into account not only absolute, but also relative deprivation (people assess their own level of welfare in part by comparing themselves with others). Using the implicit distributional weights embodied in this welfare function, we can derive the marginal gains from additional investments in government programs. If \( \bar{x} \) denotes the mean benefit of a social program \( x \) across the whole population, and if \( \eta \) is the Gini income elasticity of that program (defined below), increasing at the margin the funds allocated to the program by multiplying the outlays by \( 1 + \Delta \) for all program participants, with \( \Delta \) small, will result in a marginal social welfare gain equal to:

\[
dW = (\bar{x} \Delta)(1 - \eta G)
\]

Equation (1) makes it clear that considerations related to both growth (as represented by the mean marginal benefit \( \bar{x} \Delta \)) and distribution (as represented by the Gini income elasticity \( \eta \) times the Gini index \( G \)) must be taken into account in program evaluations. The Gini income elasticity \( \eta \) (hereafter GIE) measures the impact of an increase of one dollar, distributed as a constant percentage change in the benefits of the program, on income or consumption inequality. Denoting by \( x \) the household (per capita) benefit from the program, by \( y \) income, by \( F(y) \) the cumulative distribution of income, and by \( \bar{x} \) the mean benefits of the program over the entire population, the GIE is:

\[
\eta = \frac{\text{cov}(x, F(y)) \bar{y}}{\text{cov}(y, F(y)) x}
\]

If the elasticity equals one, a marginal increase in benefits will not affect the Gini coefficient in after-tax after-benefit income. If the elasticity is less (greater) than one, then an increase in benefits will decrease (increase) the Gini of income. The smaller the elasticity, the larger the redistributive impact of the program and the gains in welfare. Since the GIE is estimated for a dollar spent on the program, we can compare programs which are of different scale in terms of outlays. A decomposition of the GIE can be used to differentiate between two properties of a program that can affect its impact on welfare: targeting and the allocation mechanism among participants (internal progressivity). The decomposition enables the analyst to assess whether the (lack of) performance of social programs and policies is due to either the selection mechanism for participants or the allocation of benefits among program participants. To differentiate between targeting and internal progressivity, define \( z \) as the targeting instrument:

\[
z = \begin{cases} 
  x_P & \text{if } h \in P \\
  0 & \text{if } h \notin P 
\end{cases}
\]

That is, \( z \) is equal to the mean benefit among participants for households who participate in the program and it is zero for households who do not participate (one could substitute the average benefit by an indicator which is equal to one without affecting the results.) The variable \( z \) is an indicator of targeting because it is only concerned with whom is affected by the program, rather than with the actual benefit received. Using this definition of \( z \), we can rewrite the GIE as a product of two elasticities as follows:

\[
\eta = \left( \frac{\text{cov}(z, F(y)) \bar{y}}{\text{cov}(y, F(y)) z} \right) \left( \frac{\text{cov}(x, F(y)) z}{\text{cov}(z, F(y)) x} \right) = \eta_T \eta_A
\]
The first term is the progressivity among participants (allocation effect). The second term is related to the targeting of the program (targeting effect). The distributional impact of a program depends on the product of its targeting and allocation elasticities. Good targeting, for example, can be offset by a bad allocation mechanism among program beneficiaries. Equation (6) is useful to assess whether the (lack of) performance of a program is due to its targeting or to the allocation of benefits among beneficiaries. But one can go further by establishing bounds for the values of the targeting and allocation elasticities. Specifically, the minimum and maximum values of the targeting elasticity depend on the share the population participating in the program and the overall Gini. Denoting by \( p \) the share of the population participating in the program, and by \( G_y \) the overall Gini, it is shown in the appendix that:

\[
\frac{(1-p)}{G_y} \leq \eta_T \leq \frac{(1-p)}{G_y}.
\]

The lower bound increases with the proportion of the population reached by the program and the level of income inequality. The relationship between the lower bound and the share of program participants is straightforward. The more households the program reaches, the less effective targeting can be because each additional participating household makes it more difficult to focus resources on the poorest. If all households participate, \( p=1 \) and the lower bound is zero. The fact that the targeting capacity declines with the overall level of inequality is perhaps more surprising, because one might expect that the higher the inequality, the higher the potential for redistribution through targeting. The intuitive explanation is that the higher the inequality, the further apart households are from each other, so that adding a small amount of resources to the program participants does not reduce inequality by a lot (remember that the elasticities capture the impact on inequality and social welfare on e per dollar basis). A similar reasoning applies for the intuition regarding the upper bound, and the two bounds are symmetric around zero.

Lower and upper bounds can also be provided for the allocation elasticity. As shown in the appendix, the minimum and maximum values of the allocation elasticity depend on the share the population participating in the program, but not on the overall Gini:

\[
-\frac{1}{(1-p)} \leq \eta_A \leq \frac{1}{(1-p)},
\]

As the share of the population participating in the program increases, the interval for the allocation elasticity increases as well, because a higher participation rates provides more opportunities for differentiation in the allocation of the benefits among participants of the program. It is important to note that the interpretation of what a good elasticity need not be the same for the targeting and allocation elasticities. In the case of the targeting elasticity, one would hope to obtain an elasticity below zero, which would indicate a good targeting performance. But if the targeting elasticity is below zero, one would hope to have an allocation elasticity above zero in order to keep the overall elasticity negative. At In reverse, if the targeting elasticity is positive, suggesting bad targeting, one would hope to have a negative allocation elasticity. It should also be emphasized that the interpretation of the upper and lower bounds for both elasticities changes depending on whether we are dealing with taxes or transfers. In the case of targeting for example, when comparing transfers, the lower bound is typically the best that can be achieved, while when dealing with taxes, it is the upper bound that one would like to reach. Note finally that equations (5) and (6) enable us in principle to compare the targeting and allocation effectiveness of programs with different participation rate, since the bounds depend on that participation rate. (The role played by the overall per capita income Gini in the bounds for the targeting elasticity is less important since the Gini is identical for all programs at any given point in time.)

QUALITATIVE EVALUATION: AN ACTOR-ORIENTED APPROACH

The quantitative evaluation provided in the previous suggests that the programs targeted according to the ficha CAS have a good redistributive impact. This does not mean, however, that there are no problems or challenges with the ficha CAS targeting or with the outreach of the various programs. In this section, in order to go beyond our quantitative results, we present findings from an exploratory study on poverty, access to government programs, and social exclusion in Chile conducted in 1998 by Clert (2000a, 2000b). Using an actor-oriented approach, the research used both quantitative and qualitative methods (see box 3.2) to explore the priorities, experience and perceptions of three sets of actors concerned with poverty reduction: a) the government leadership; b) the residents of Huechuraba, a socially disadvantaged Comuna of Greater Santiago, and c) public agents involved at different levels of policy formulation and implementation. Here, we focus on the views from households and social workers.

The View from the Households

Clert's micro-study showed that exclusion from safety nets and other social entitlements strongly relates to lack of access to information. Three key findings emerged from the household quantitative survey as to the degree of information on social entitlements among household heads or spouses living in the Comuna of Huechuraba. First, on average, the proportion of respondents who declared not having heard at all of the social entitlement under review was relatively high, at 51 percent of the sample. Second, this proportion varied depending on the kind of social entitlements. It reached 74 percent for benefits such as municipal programs in health and education which provide safety nets (e.g., free provision of medicine or material help for the buying of the school uniform). It was also high for the main national program against poverty among women-headed households, since 70 percent of the female respondents had not heard of the program at all. The awareness rates were better for social funds (which tend to be promoted through radio and TV), and vocational training classes which have been for long a priority of both central and local governments. However, even when the respondents had heard of the social entitlements, a large share did not know how to apply to these benefits. For instance, among the respondents who knew about the existence of vocational training courses, half did not know how to apply for these courses. Given the fact that the survey was carried in a poor neighborhood whose inhabitants are primary targets for the government's programs, this lack of information is probably detrimental to the success of the programs.

One way to analyze the causes of the poor transmission of information to the programs' potential beneficiaries is to look at the ways 'informed' respondents gained their knowledge. Taking the example of the government's income transfers (subsidios monetarios), figure 3.1 points to four ways in which information was obtained by households on these programs. The most frequent sources of information were close contacts such as friends, family and neighbors (43 percent of the total number of informed respondents). More official actors such as municipal social workers or health centers rank second, contributing to 37 percent of the informed respondents. Among these more official sources of information, the impact of direct visits to the home of respondent by a social workers was large. Social organizations such as neighborhood associations were at the source of information on government programs in only 6 percent of the cases. Finally, more distant modes of information such as posters or radio announcements accounted for only 5 percent of the informed respondents.
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Box 3.2: Methodology for the Qualitative Evaluation

Much of the research on social exclusion is done without consultation with those who experience social disadvantage and those who formulate and implement social policies. The qualitative evaluation of the ficha CAS presented here is part of a broader study on poverty and social policy in Chile carried out by Clerc (2000b) using an actor-oriented methodology. The research was carried within a social exclusion framework which recognizes the multidimensionality of poverty (e.g., the connection between distributional and relational dimensions), the role of institutional factors in the generation of social disadvantage, and its time and spatial aspects. More specifically, the research explored the priorities, experience and perceptions of three sets of actors concerned with poverty reduction; a) the residents of Huechuraba, a socially disadvantaged district of Santiago through a micro study; b) local and central government staff concerned with poverty reduction at different levels of the state apparatus, through interviews and focus groups, and c) the government leadership, through a study of official policy documents and discourse. This methodology allowed to confront central government priorities with the reality of poverty and social exclusion, as experienced and perceived by both Huechuraba’s residents and the social practitioners implementing the policies. The fieldwork was carried out between December 1997 and June 1998.

The micro-study of the residents of Huechuraba

The study of the residents of Huechuraba took place between December 1997 and May 1998. The research included an area survey, a small household survey, and qualitative interviews.

Area survey. The micro-study started with a comuna survey. Like traditional ‘community surveys’, it aimed at identifying the characteristics of the area. Given the complex and multidimensional questions raised by a social exclusion perspective, this entailed going beyond the usual area profile used in poverty assessments. It also required a review of secondary resources and an extensive use of key informant interviews: 25 key informant interviews were conducted in December 1997 (13 municipal agents including managers of programs, departments and one administrator; five agents involved in service provision; five social leaders of community-based organizations; two NGO representatives; and one resident who had lived in a poor sector of the comuna for the last thirty years).

The household survey. The survey was based on a stratified random sample of 88 households living in Huechuraba. Given the spatial heterogeneity of the comuna, the stratified sample was used to ensure the adequate representation of all neighborhood units and campamentos (informal settlements). However, given the focus of the study on social disadvantage, the most well-off area of the comuna was excluded from the survey. Regarding respondents, the female head of household or the female partner of the male identified as the head of household was chosen for the interviews. If the head of household was a male living by himself or with children, then he was the respondent. Despite the preference for female respondents for practical and methodological reasons, the research also saw the importance of including male respondents in order to elicit differences in the experience of social disadvantage between men and women. In the end, there were 18 men out of a total of 88 respondents. In terms of content, the questionnaire aimed at getting information on labor market participation and access to social entitlements (social programs, benefits, social services), as well as organizational and relational issues relevant for the social exclusion perspective adopted (e.g., participation in organizations, level of information on social entitlements, reliance on social networks for the provision of care). The questionnaire was divided between questions on the respondent herself, and questions regarding other household members, which aimed at capturing intra-household differences. After completion of the survey, the data was entered and analyzed using the Statistical Package for the Social Sciences (SPSS). Basic frequencies and cross-tabulations helped in selecting interviewees for the sub-sample qualitative interviews.
Qualitative interviews. The household survey was followed by a sub-sample of 24 semi-structured interviews. A 25 percent non-random sub-sample of the original questionnaires was selected, ensuring that the sub-sample was as representative as possible of the overall profile found in the household survey. In order to better capture intra-household differences and a wide range of experiences of exclusion, the household head was not always chosen as the interviewee. In order to elicit gender-based differences, a little more than a third of the interviews were conducted with men, and on three occasions the choice was made to interview separately both the male and the female partners within the same household. The semi-structured interviews aimed at exploring subtle visible mechanisms of exclusion such as perceptions of exclusion and/or discrimination on the basis of specific elements of identity (e.g., age, gender, place of residence) and causal relationships suggested by the preliminary results from the quantitative data analysis of the larger household survey. The interviews focused on capturing the personal experience and the perceptions of exclusion/inclusion of the interviewees in areas identified in the survey questionnaire, including, for instance, the job interview process when searching for employment and the perceptions of the quality and accessibility of various social entitlements. Each interview ended with a participatory exercise in the form of a Venn Diagram, which was used to highlight perceptions of social and institutional relationships. Derived from Participatory Rural Appraisal (P.R.A) methods and based on the drawing of circles, this exercise asks whether there exist different actors or institutions that are relevant to participants in terms of their capacity to help and/or care for them in times of trouble. It also allows inquiring into the perceived caring and helping capacity of these actors and institutions.

Focus groups and interviews with public agents

The key criterion for the selection of public agents was to obtain the insights of agents located at different stages of the policy process, from the level of local implementation and practice to the level of central policy formulation and agenda setting. On this basis, the choice was made to select professionals within the municipality of Huechuraba as well as central government officials. The research used different qualitative techniques for the two types of agents. The interviews were conducted in June 1998.

Local government staff. The Huechuraba municipality was similar to other local government structures in that the unit for ‘community development’ DIDECO (Dirección para el Desarrollo Communitario) was responsible for social development and poverty reduction. Therefore, most of the agents interviewed were located there. Since the micro-study had already provided an opportunity to interview middle managers and social planners, only three local officials were selected and the focus was placed on agents located at lower hierarchical echelons of the municipality, i.e., social workers and welfare assistants (técnico-sociales) for the welfare (atención social) and housing sub-units. This choice was made mainly for two reasons: a) the positions of the agents placed them in direct contact with disadvantaged residents; and b) the agents occupy a key place in the minds of disadvantaged residents, as identified by the micro-study. In terms of techniques, focus groups (four in total) were used for social workers, welfare assistants and CAS surveyors since they were sufficiently numerous and homogeneous in their educational level and the tasks they performed. Additionally, four semi-structured interviews were used for local managers located at a higher hierarchical level.

Central government staff. There were two key criteria for the selection of these agents. First, senior civil servants had to be closely involved in the process of policy formulation and agenda-setting, and also directly involved with the government’s anti-poverty strategy. Second, the position of the civil servants needed to allow them to discuss different aspects of the government’s anti-poverty strategy, from overall orientations and priorities to social policy methods and planning. Nine policy advisors and planners located at the Ministries of Finance, Planning, Labor (Institute of Vocational training SENCE), Women and the Secretariat of the Presidency were selected. Semi-structured interviews were used.

Source: Clert (2000b).
These findings suggest that three main causes may be at the source of the lack of information about social entitlements among the poor. First, the isolation of some among the poor from social networks (e.g., family and neighbors) may reduce access to information. Second, the lack or irregularity of visits to the municipal centers of information by the poor may also reduce their exposure to information. Third, the fact that only a minority of households benefit from spontaneous home visits by social workers also reduces the likelihood of being informed (many of these visits are organized during barridos which are general 'sweeps' of an area). Although statistics such as those provided in figure 3.1 cannot claim conclusive causal links, they do raise concerns about the mobility of public actors such as social workers who need to be in close contact with those among the poor who experience social isolation and disadvantage the most. Focus group discussions with practitioners from Huechuraba confirmed the concern regarding the lack of mobility and outreach among social workers. The social workers and técnico-sociales called themselves for more mobile initiatives (such as the barridos) in order to better identify existing needs rather than solely responding to demands from applicants coming to the municipality. As a social worker summed it up: "We need more people on the ground, accompanying processes. Before the integration of people into social programs, you need to make an assessment of who might need these programs. This is the opposite of what we're doing now in most cases, which is to wait for the demand to come and help people benefit from the program."

Figure 3.1: Sources of Information on Income Transfers Among Poor Households

Note: The state income transfers consist of SUF, SUM, SRN, SAP, and PASIS
Another important finding of the study was that the rejection of the respondents’ applications for different social entitlements was directly linked to them obtaining an inadequate number of points on the means-testing instrument *ficha CAS*. This was reported by a majority of unsuccessful respondents who had applied for one or more of the following social entitlements: the gratuity card (also named *tarjeta de indigencia*) which allows free access to public health facilities, the income transfers, the low-cost housing (mainly *vivienda básica*) and the access to public childcare centers (mainly through the JUNJI)\(^7\). The emphasis of the *ficha CAS* on material possessions may overlook the risks which households can be faced with and which can make them vulnerable. The examples of Maria and Margarita can make this clear.

- Maria, who was 52 at the time of her interview with the CAS surveyor, was without any source of income other than the help of her children. A sudden illness in her spine prevented her from working. Separated from her husband, she was unable to obtain a pension from him. She was responsible for her eldest daughter who suffered from a psychiatric illness and for her daughter’s child. She applied for a small pension, but the points she scored on the *ficha CAS* at the screening test were found to be too high, as she recalls: "*They came to see me, she asked me if I had a washing machine – yes I do I said to her, ‘do you have a centrifuge machine’ – yes I do, ‘refrigerator’, – yes I do, ‘Right Madam’, she said, ‘you don’t have any right to a pension’.*"

- Margarita recalled that her daughter was hospitalized and that she needed the indigence card since she could not afford the cost of the medical attention. Her daughter’s illness had coincided with Margarita’s loss of her job, and she had been unemployed for two months at the time of the visit of the CAS surveyor. She explains: "*When she came here, she found me better than I am now.... In those years and because I had been working, I had my floor impeccable. Inclusively I wasn’t polishing the floor with wax but with brown shoe product. So it looked really shiny.... She was looking everywhere and so she told me, just like that: how could I buy floor wax if I didn’t have money to cook and to meet my expenses. I told her it was illogical, since it was two months that I was out of work, but when I was working, I had bought the wax. And my little plants, my little things... With time, I had been buying them and so now that I was in need, without a job, I wasn’t going to take out a piece of the table, or a bit of the armchair. This, she didn’t understand.... I told her: ‘You mix up poverty with cleanliness. I’m poor I said, maybe I don’t have a lot to put into the casserole. Yet I have a rag, I said, and I still have something to clean.’*

These examples show that both applicants were unable to generate any income, so that they were becoming highly vulnerable, one through her illness and the other through the loss of her job. While their life events justified external support to prevent them from falling further into poverty, the rules of targeting excluded them from such support because a presumption of well-being was based on their possession of a number of assets. Margarita’s reasoning suggests a

\(^7\) From a gender perspective, exclusion from public childcare centers constitutes a contradiction between the priority assigned to female labor-market insertion and the use of exclusionary rules of selection by the Public Institution for Childcare in Chile (JUNJI). At the national level, SERNAM has managed to remove the exclusionary rule for women heads of households, but the new rules have not yet filtered to the local level. Furthermore, it seems that the rule still applies to women who were not household heads.
logic for the granting of government support which contrasts with the more rigid criteria of the \textit{ficha CAS} instrument.

\textbf{The View From Social Workers and Welfare Assistants}

Drawing on interviews and focus-group discussions with local staff, Clert (2000a, 2000b) also analyzed the experiences and perceptions of municipal professionals in direct contact with disadvantaged citizens. The social workers and welfare assistants (\textit{técnicos-sociales}\textsuperscript{18}) who use the means-testing instrument provided by the \textit{ficha CAS} in their daily work mention their frustration with the rigidity of the eligibility criteria associated with the \textit{ficha CAS}. Following on site visits and in-depth interviews with residents, they would at times conclude that assistance was needed without being able to offer it because of the results of the CAS point system. As one social worker put it: “social reality is much more dynamic, changing and complex than the criteria.” Or as a técnico-social reflected: “Criteria are designed for extreme situations, but in practice most situations are not as extreme... The CAS surveyor might tell us the lady earns 100,000 pesos. Right, but she must pay for rent, water, electricity and food. This will never be enough for four people!”

Local level staff stressed in focus groups the need for less focus on material possessions such as a color TV, the type of roof materials and the like. Questions relating to possessions were seen as outdated, given ‘the overall development of the country’ and ‘people’s easy access to goods such as a refrigerator... through credit facilities.’ Another argument was that possessions deflected attention from the central issue of the applicant’s means of livelihood. A ‘more relevant way to assess poverty’, would be ‘to ask if and how people manage to make ends meet’. Técnicos-sociales also mentioned that low-income sectors often improve the quality of their house and equipment by low-cost, self-help means. Therefore, such improvements do not necessarily reflect an increase in income or security. Rather, they reflect people’s desire to ‘have a better life’ and to gain greater dignity. Técnicos-sociales also noted that rigid criteria could end up making people more vulnerable to destitution and long-term insecurity. By denying state financial support, the emphasis on enumerating possessions in targeting indirectly left people with no other option than to sell their assets ‘in order to survive’. Finally, local staff made a number of suggestions for improving the targeting system of the \textit{ficha CAS}:

- \textbf{Indicators of vulnerability:} Professionals suggested to pay greater attention to vulnerability indicators so as not to exclude people who are in need of assistance even though they may appear to be non-poor on a assets basis. As one professional put it: ‘surveyors ask how much do you make a month? They don’t ask what kind of job people do, what kind of contract they have, if they have one’. The recommendation from social workers would be to pay more attention to labor market exclusion.

- \textbf{Private transfers:} Local staff pointed to the dangers associated with the way the CAS form takes into account private transfers (e.g., from relatives and friends) registered under the category ‘\textit{ayuda de terceros}’. CAS surveyors must translated private transfers, whether in kind or in cash, into an average monthly income. Imposed by MIDEPLAN rules and long before by the former military regime, this obligation originates in the assumption that benefit

\textsuperscript{18}The ‘técnicos-sociales’ are welfare assistants who, unlike social workers, do not have a university degree.
claimants tend to lie about their actual sources of livelihood. While local staff recognized that this could be true for a certain proportion of claimants, they also warned against hasty generalizations. They suggested that such rules ended up distorting the reality and reliability of people’s survival strategies and needs. As one worker put it:

"Why can't they believe that some people don't have any money to live? You often find an older woman who tells you 'señorita, ...I don't do any pololitos', I've got nothing.' So, the surveyor asks 'but what do you live on then señora?' So she says 'my son brings me a kilo of rice..., my neighbor offers me a kilo of sugar and pieces of bread.' The surveyor transforms all this into money and her points increase. But then, the señora explains 'because I'm on my own, if the neighbor gives me three pieces of bread, I eat half of it at lunch time because sometimes I get nothing else to eat. Then I eat the other half, I still keep some for the day after and sometimes I eat bread that is two days old.' It's real, people have told me this and I've been able to observe it so often in my site visits.... But sometimes the surveyor only heard 'look, the neighbor offers me two pieces of bread a day!'"

Such experiences lead some técnicos-sociales to push for reflecting as faithfully as possible the applicants’ own words in this area and for avoiding mechanical assumptions for the valuation of private transfers.

- **Intra-household allocations:** A third area of reform suggested by professionals was the need for CAS means-testing methods to recognize intra-household allocations. This is particularly important from a gender perspective, and it can be illustrated with a reference to pregnant teenagers. Classified as dependants, they end up being excluded from maternity benefits. Unable to afford a place of their own, these future single mothers are assumed to benefit from their parents’ support but as a técnico-social put it:

  "We're talking about a pregnant kid who needs a bit of support here...! Fair enough, her parents might help her a bit, somehow, sometimes. But sometimes parents also reject them, tell them off... So the girls come to the municipality for help but there's no support there either...."

The assumption of the parents’ support is all the more worrying in the Chilean context as many studies have pointed to the strong stigmatization attached to teenage pregnancy (Latorre et al, 1996).

- **Training of surveyors:** Fourth and lastly, the professionals raised the need for better training of the surveyors themselves and for a better sensitization to the issues outlined above.

**The Changes introduced in September 1999: Achievements and Persisting challenges**

In 1999, there was an official recognition of the limitations of the CAS targeting system, with particular emphasis on the outdated character of some variables such as the presence of TV equipment and the like. The MIDEPLAN (1999:29) report on the modernization of the CAS system stated that in the last 13 years, the current (CAS) model had lost most of its ability to

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19 *Pololito* is a colloquial name for casual work or temporary job.
identify eligible populations among the poor across the socio-economic spectrum. On the basis of the results of simulations, the Government introduced three main changes to the CAS system. First, the revised CAS system dropped the questions related to the access to electricity (under the housing factor) and to the possession of a TV (under material assets or *patrimonio*). These questions are no longer considered as important proxies for poverty since an increasing number of households have access to those goods. Second, different systems for rural and urban areas were eliminated and merged into a single national assessment tool. Third, a revised system of weights and scaling was introduced for the various variables entering in the CAS score. In the new system, the weights for housing have increased despite the elimination of the question on access to electricity. Within the income-assets dimension (*Ingreso familiar/Patrimonio*), the weight for the income sub-factor has been reduced, while that for the overall equipment/material assets of the household has been increased. The weights for the factors related to education (years of schooling) and the occupation of the head have not been modified.

Simulations suggest that the revised system is more effective in identifying the poor and the non-poor, and in preventing errors of inclusion or exclusion in social programs. MIDEPLAN (1999: 36) also reports that with the revised system, 53.1 percent of households will see their CAS score decrease (these households will be classified as poorer in the new system than in the old), while 46.9 percent of households will see their CAS score increase. In terms of access to benefits, the share of households with a total number of points below 550, i.e. the families entitled to the benefits described in section I above, should increase from 22 percent (908,223) in the old system to 26.6 percent (1,096,973) in the revised system.

Nevertheless, concerns remain. While the errors of inclusion may be reduced, the errors of exclusion of poor and vulnerable households will still occur. While this is to some extent unavoidable, key indicators of need and vulnerability are still not incorporated into the new CAS system. This implies that issues such as intra-household allocations, the precariousness of the occupation status, the degree of indebtedness, the occurrence of an illness, etc., are not taken into account. Moreover, private transfers, whether in cash or in kind, even if minimal, are still registered under the category ‘*ayuda de terceros*’ and translated into an average monthly income. Our qualitative findings suggest that there could be improvement in the CAS targeting system if these issues were somehow integrated.

**The impact of additional eligibility criteria: Housing and child care**

Despite significant achievements, some additional rules used for determining eligibility to social services also have exclusionary effects. In the eligibility rules used by the Ministry of Housing SERVIU for its own programs, the information provided by the *ficha CAS* is only one element among others. Specifically, applicants with an adequate number of CAS points cannot be eligible if they do not meet required level of savings (table 3.1). Affordability, therefore, is a key obstacle. As one worker put it for the program of basic housing (*vivienda básica*): ‘This

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20 MIDEPLAN (1999) proposed an alternative model for the calculation of the CAS score which would have incorporated new variables such as access to health insurance and pensions. But incorporating these new variables would have required to apply the CAS survey again. The administrative and financial costs were considered too high at the time.
programme is frustrating... It's supposed to be targeted at the poorest yet people with no saving capacity can't have access to it.

The difficulties encountered by households for benefiting from public housing programs can also be illustrated with the examples of the so-called allegados. These are self-help organizations in which people collectively advocate for public housing and pool their savings towards this end.

Group-based housing applications have been encouraged by the post-1990 Chilean democratic governments. But allegados are more likely to succeed in getting low-cost houses for their members if they all have the same savings capacity, and apart from being unable to be successful in their own application for the government's housing programs, many tenants can't even save enough to be part of allegados committees. In a household interview, the secretary of one allegados committee suggested that some directivas (rules from the association's board) put pressure to keep out those with precarious or insufficient saving capacities. The selection process of membership deserves to be quoted in detail:

*The secretary:* There is a minimum to get into the scheme. We were around 50, but this was still useless. Either people didn't have the money or they couldn't be reached .... So we started to eliminate people.

*The interviewer:* How did you select your people then?

*The secretary:* We started to ask for money, they had to give us a certain amount of money by a certain deadline. We went to every address we had, explained what we were doing .... In the end, we only kept 15 out of the 50. They were those who really had the money and all their papers in order.

*The interviewer:* How much did they need to be selected?

*The secretary:* We put a minimum of $300,000 (i.e., more than four times the minimum wage.)

The inability to save is particularly widespread among the low-income elderly because they are no longer able to generate new income. This makes it difficult for them to receive help for the improvement of the quality of their homes, which in turn makes them more vulnerable to health risks (e.g. exposure to the cold and deficient sanitary services) and social risks (exposure to theft and aggression). To some extent, the rules used for access to housing programs also exclude women. Although women heads of households are usually given an additional 10 points in their application for social housing, the women who were previously married and whose ex-husbands own a house are not entitled to apply for social housing because the government benefit is only given once and to the family rather than to the individual.

Another example of exclusionary rules can be observed with regards to childcare. Apart from having the adequate number of points in the CAS index, the mother of the child must show proof of employment and associated working hours. This criteria tends to exclude three categories of women: teenage mothers who wished they could complete their schooling instead of entering the labor market; women involved in precarious employment with irregular working hours such as

21 The term refers to a housing status in which the allegado is allowed by the person who officially owns or rents the house to live under the same roof without paying a rent, although they sometimes share bills and other costs.
cleaners or domestic workers; and most of all, female job-seekers whose mobility ends up being considerably restricted.\textsuperscript{22}

**CONCLUSION AND POLICY IMPLICATIONS**

The quantitative evaluation of the targeting performance of the government programs whose eligibility rules are based on the scoring system of the \textit{ficha CAS} suggests that the scoring system is broadly effective in identifying the poor and improving the redistributive impact of state-funded pension assistance, family allowances, water subsidies, housing subsidies, and childcare programs. While some programs are better targeted than others, all programs are to some extent successful at channeling resources to the poor. This does not mean that the \textit{ficha} CAS system does not have some weaknesses. Several of these weaknesses have been revealed by the qualitative evaluation. In this conclusion, we would like to highlight a few recommendations for improving Chile’s targeting system.

In order to improve the impact of the government’s income transfers and social programs, it may be necessary for government agents to get closer to the poor. Two suggestions can be provided. First, it may be useful to implement a more effective communication strategy since it appears that the poor still lack access to the relevant information about the various programs. Many poor households do not know about the existence of the programs, and among the households who are aware of the programs, many do not know how to apply for benefits. Second, it may be useful to encourage more contacts between the poor and social workers. Beyond the reception of applications at the municipal welfare office, initiatives such as the “sweeping” of areas could be encouraged, so as to reach those among the poor who have weak connections to municipal institutions. Better contacts between social workers and the poor may also help if social workers are given some latitude to depart from the strict scoring system of the \textit{ficha CAS} in order to respond to situations of vulnerability which are not well measured by the simple possession of assets.

Related to this last point about vulnerability, more emphasis could be placed in the \textit{ficha CAS} system on the prevention as opposed to the alleviation of poverty. Targeting rules for centrally financed income transfers and other social programs could be revised so as to prevent the fall of vulnerable people into a vicious circle of loss. This is especially important in a context of high unemployment rates which tends to provoke brutal changes in the lives of the poor. The means-testing approach of the \textit{ficha CAS} may lead to the exclusion of households in need of assistance when the CAS criteria fail to adequately measure the dynamic and complex reality of deprivation. The emphasis on material possessions could be reduced in the CAS in order to make place for indicators such as the loss of a job or a sudden illness.

Another finding from the qualitative research refers to the need to adapt eligibility rules in order to better take into account intra-household allocation patterns. Paying attention to individual needs in the household also cuts across the variable of age. This was illustrated by the difficulty for pregnant teenagers to gain access to maternal benefits when they live in larger households.

\textsuperscript{22} Women involved in illegal activities –mainly prostitution– are also systematically excluded and therefore miss any chances of reinsertion opportunities through the possibility for instance, to attend training courses.
The potential for gender discrimination also exists in the access rules to means-tested housing and child care. Another group which may not be covered well enough is the low income elderly, especially when informal private transfers are taken into account by CAS surveyors in order to determine eligibility for pension assistance.

Finally, from a methodological point of view, this paper has illustrated the benefits of going beyond quantitative assessments for the evaluation of targeting instruments. On the basis of quantitative simulation models (MIDELPLAN, 1999), the Chilean government recently introduced some modifications to the ficha CAS, including a lesser emphasis on possessions. But the system still has limits which tend to be overlooked by government officials. One more recommendation emerging from this paper would be to collect in a systematic and periodic way the views and opinions not only of the local staff who actually implement means-testing on the basis of the CAS form, but also of poor and/or vulnerable households themselves.
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### APPENDIX ONE: DESCRIPTION OF SOME OF THE MAIN PROGRAMS TARGETED ACCORDING TO THE *FICHA CAS*

<table>
<thead>
<tr>
<th>BENEFIT</th>
<th>Nature (amounts in Chilean pesos relate to the year 1998 and are monthly amounts)</th>
<th>Who can apply?</th>
<th>Eligibility criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOR ALL BENEFITS AND PROGRAMS BELOW</strong></td>
<td><strong>- The common eligibility criteria is to show evidence of lack financial resources, according to the evaluation made through the means-testing survey with the <em>ficha CAS</em></strong>&lt;br&gt;- be a resident of the <em>comuna</em> (borough) responsible for the selection of beneficiaries**</td>
<td><strong>- Low-income elderly people over 65 years of age</strong>&lt;br&gt;- be older than 65 years at the time of the survey with the <em>ficha CAS</em>**&lt;br&gt;- lack of access to any other social insurance including pensions&lt;br&gt;- total income inferior to 50% of the minimal pension amount (approx. 23,415)**</td>
<td><strong>- Physically disabled people (personas <em>invalidas</em>), older than 18 years of age&lt;br&gt;- No access to other pensions or other forms of social protection mechanisms (sin previsión social)</strong>&lt;br&gt;- the total income of the applicant and of his family group (comprising all other members of the dwelling unit) cannot be superior to the minimal pension**</td>
</tr>
<tr>
<td><strong>PASIS</strong>&lt;br&gt;Pensión Asistencial&lt;br&gt;Pensions for the elderly and for the disabled&lt;br&gt;- Pensión de Ancianidad (pension for the elderly)**</td>
<td><strong>- minimal amount: $23,415&lt;br&gt;- automatically entitles the elderly with a card allowing free access to public health services (<em>tarjeta de gratuidad médica</em>)&lt;br&gt;- the pension can no longer be provided if the beneficiary situation stops meeting the criteria. This is usually evaluated following the visit by a <em>ficha CAS</em> surveyor.</strong></td>
<td><strong>- Physically disabled people (personas <em>invalidas</em>), older than 18 years of age&lt;br&gt;- No access to other pensions or other forms of social protection mechanisms (sin previsión social)</strong>&lt;br&gt;- the total income of the applicant and of his family group (comprising all other members of the dwelling unit) cannot be superior to the minimal pension**</td>
<td><strong>- be older than 65 years at the time of the survey with the <em>ficha CAS</em></strong>&lt;br&gt;- lack of access to any other social insurance including pensions&lt;br&gt;- total income inferior to 50% of the minimal pension amount (approx. 23,415)**</td>
</tr>
<tr>
<td><strong>- Pensión de Invalidez (Invalidity)</strong></td>
<td><strong>- the benefit has a duration of 3 years and can be renovated, provided that the requisites are still met (mainly number of points with the <em>ficha CAS</em>)&lt;br&gt;- automatically entitles the elderly with a card allowing free access to public health services</strong></td>
<td><strong>Same as above, except the following characteristics:&lt;br&gt;- mentally disabled people&lt;br&gt;- no age requirement</strong></td>
<td><strong>Same as above</strong></td>
</tr>
<tr>
<td><strong>- Pensión de Invalidez para Deficientes Mentales</strong></td>
<td><strong>Same as above</strong></td>
<td><strong>Same as above</strong></td>
<td><strong>Same as above</strong></td>
</tr>
<tr>
<td><strong>SUF Subsidio Unico Familiar (family allowances)</strong></td>
<td><strong>- al Menor (child benefit)</strong>&lt;br&gt;- amount: $2500&lt;br&gt;- duration: 3 years- can be renewed**</td>
<td><strong>All dependent children, under 15 years of age or studying children under 18</strong>&lt;br&gt;- for children under 6, health control must be up to date&lt;br&gt;- for children older than 6, must be enrolled in primary education (Educación Básica)&lt;br&gt;- the child cannot perceive an income equal or superior to the amount of the benefit**</td>
<td><strong>- the father of the child cannot receive family allowances from other sources (e.g. through his employer)</strong>&lt;br&gt;- for children under 6, health control must be up to date&lt;br&gt;- for children older than 6, must be enrolled in primary education (Educación Básica)&lt;br&gt;- the child cannot perceive an income equal or superior to the amount of the benefit**</td>
</tr>
<tr>
<td><strong>- Maternal</strong>&lt;br&gt;maternal benefit</td>
<td><strong>- maternal benefit&lt;br&gt;- amount: 2800 received ten times .</strong></td>
<td><strong>Mothers of the children selected for the <em>subsidio al menor</em></strong>&lt;br&gt;- the father of the child cannot receive family allowances from other sources (e.g. through his employer)**</td>
<td><strong>- the father of the child cannot receive family allowances from other sources (e.g. through his employer)</strong></td>
</tr>
<tr>
<td><strong>- a la Madre maternal benefit</strong></td>
<td><strong>- child benefit&lt;br&gt;- amount: $2500&lt;br&gt;- duration: 3 years- can be renewed</strong></td>
<td><strong>- pregnant women. To be allowed from their fifth month of pregnancy&lt;br&gt;- the father of the child cannot receive family allowances from other sources (e.g. through his employer)</strong></td>
<td><strong>- the father of the child cannot receive family allowances from other sources (e.g. through his employer)</strong></td>
</tr>
<tr>
<td><strong>- Recién Nacido</strong></td>
<td>- child monthly benefit of 2800 pesos – lasts for three years from the birth of the child</td>
<td>Mothers who benefit from the <strong>subsidio maternal</strong> and who do not have access to other forms of social protection (sin prevención social)</td>
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</tr>
<tr>
<td><strong>Subsidio de agua potable</strong></td>
<td>- state contribution to the consumption/use of drinkable water and water sewerage ( alcantarillado) - This contribution finances half of the consumption of water up to a maximum of 15 m³</td>
<td>Low income families facing difficulties to pay for water services</td>
<td>- be up to date with the payment of water and sewerage services</td>
</tr>
<tr>
<td><strong>Housing programs</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Vivienda Progresiva I Etapa</strong></td>
<td>Subsidy of 132 UF for the construction of housing. The program vivienda progresiva has two stages. Stage I (etapa I) comprises, as a minimum, of an urbanized site and a sanitary unit (bath/kitchen) total value: 140UF. The applicant’s contribution will be 8 UF, of which 3 UF are necessary as a requisite for the application.</td>
<td>- families facing emergency situation in terms of their housing or simply lacking adequate housing of housing - particularly (but not necessarily) applies to families living under free-rent arrangements (allegados) - elderly people who are not owners of or assigned with a vivienda, and who did not previously receive a housing subsidy</td>
<td>- All those who are registered and who meet the criteria will enter the selection process according to the strict order of 'points' obtained in the specific survey conducted with ficha CAS - The applicant must have saved the equivalent of 3 UF. - group-based applications are encouraged</td>
</tr>
<tr>
<td><strong>Vivienda Progresiva II Etapa</strong></td>
<td>2d stage of the program above improvement of the housing unit</td>
<td>Low-income households willing to have access to housing in a definite manner (en forma definitiva)</td>
<td>- specific and complex criteria – see MIDEPLAN (1998:21)</td>
</tr>
<tr>
<td><strong>Vivienda Básica (basic housing)</strong></td>
<td>- construction of solid housing unit (can include i) one-floor house; ii) two-floor houses; and iii) apartment in a three-floor building block. - Total value is 240 UF and the financement is arranged as follows: - applicant’s savings (10 UF- see eligibility criteria) - 140 UF state subsidy (in monthly dividends throughout 12 years) - and the remaining through the applicant’s own contribution (monthly dividends)</td>
<td>- All those who are registered and who meet the criteria will enter the selection process according to the strict order of 'points' obtained in the specific survey conducted with ficha CAS - the applicant must have saved the equivalent of at least 5 UF in order to be able to enter the process of selection. By the time the housing is available for delivery, the applicant must show evidence of the same amount of savings.</td>
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<tr>
<td><strong>Childcare programs</strong></td>
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<tr>
<td><strong>Programs JUNJI, INTEGRA</strong></td>
<td>Integral care of the child in childcare centers (includes health, food provision, social welfare – atención social and dental-medical attention)</td>
<td>- for children between 84 days and a years and 11 months (children under five)</td>
<td>- in addition to ficha CAS, there is a 'social report' evidencing lack of resources. - mother must be working, with certificate certifying the mother’s working situation, her income, working hours and type of activity.</td>
</tr>
</tbody>
</table>

23 Other centrally financed housing programs include the rural housing subsidy (**Subsidio Habitacional Rural**).
APPENDIX TWO. CAS FORM AT THE TIME OF THE QUALITATIVE FIELDWORK (DECEMBER 1997)- ENCUESTA CAS

SISTEMA DE INFORMACIÓN SOCIAL

SECCION 0: DATOS GENERALES

<table>
<thead>
<tr>
<th>Región Metropolitana</th>
<th>1</th>
<th>1</th>
<th>3</th>
<th>Comuna Huecharaba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincia</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>Unidad Vecinal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Folio No</th>
<th>Fecha de Encuesta dia/mes/ano</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Nombre del Campamento, Población o Villa</th>
<th>Código Manzana</th>
<th>Cod. Calle</th>
<th>Nombre de la Calle o Camino</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encuesta:</td>
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<tr>
<td>Revisor:</td>
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<tr>
<td>Supervisor:</td>
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</tbody>
</table>

SECCION 1: PROTECCIÓN AMBIENTAL

MATERIALES USADOS EN MUROS EXTERIORES DE LA VIVIENDA

1. Ladrillo, concreto o bloque
2. Albañilería de Piedra
3. Tabique forrado
4. Adobe
5. Mixto aceptable (combinación de material pero alguno de tipo 1 a 4)
6. Barro, quincha, pirca
7. Tabique en forro interior
8. Desecho (cartón, latas, sacos, etc)
9. Mixto deficiente (combinación de materiales pero ninguno de tipo 1 a 4)

MATERIAL UTILIZADO EN EL PISO DE LA VIVIENDA

1. Radier revisto (radier cubierto con parque, tabla, linóleo, flexit, baldosa, alfombra, etc)
2. Radier no revisto (radier a la vista)
3. Mixto aceptable (combinación de materiales, pero alguno de tipo 1 a 4)
4. Madera colocada sobre solera o vigas
5. Madera, plástico o posteriores colocados directamente sobre la tierra
6. Piso de tierra
7. Mixto deficiente (combinación de materiales, pero ninguno de tipo 1 o 2)

MATERIAL UTILIZADO EN EL TECHO DE LA VIVIENDA

1. Teja, tejuela, losa, piedra
2. Zinc o pizarreño con cielo interior
3. Mixto aceptable (combinación de materiales, pero alguno de tipo 1 o 2)
4. Zinc o pizarreño, sin cielo interior
5. Fonolita
6. Paja, coirón, totora, caña
7. Desecho (cartón, latas, sacos)
8. Mixto deficiente (combinación de materiales, pero ninguno de tipo 1 o 2)

SECCION 2: HACIMIENTO

22 PIEZAS OCUPADAS DE LA VIVIENDA

<table>
<thead>
<tr>
<th>Dormitorios</th>
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<tbody>
<tr>
<td>Estar (living)</td>
<td></td>
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<tr>
<td>Comedor</td>
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<tr>
<td>Estar - Comedor</td>
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<tr>
<td>Cocina (sólo si es utilizada)</td>
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<tr>
<td>Como estar o comedor</td>
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<tr>
<td>Total de Piezas</td>
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</table>

### SECCION 3: SANEAMIENTO Y CONFORT

<table>
<thead>
<tr>
<th>TIPO DE ABASTECIMIENTO DE AGUAS DE LA VIVIENDA</th>
<th>SISTEMA DE ELIMINACIÓN DE EXCRETAS DE LA VIVIENDA</th>
<th>DISPONIBILIDAD DE TINA O DUCHA</th>
<th>SUMINISTRO ELECTRICO DE LA VIVIENDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>El agua proviene de red pública de agua potable</td>
<td>De uso exclusivo (No comparte con otras viviendas)</td>
<td>De uso exclusivo (no comparte con otras viviendas)</td>
<td>La vivienda dispone de electricidad</td>
</tr>
<tr>
<td>1. Con llave dentro de la vivienda</td>
<td>1. W.C. conectado a alcantarillado</td>
<td>1. Tina o ducha, con agua caliente</td>
<td>1. Con medidor particular</td>
</tr>
<tr>
<td>2. Con llave dentro del sitio fuera de la vivienda</td>
<td>2. W.C. conectado a fosa séptica</td>
<td>2. Tina o ducha, sin agua caliente</td>
<td>2. Con medidor compartido (con otras viviendas)</td>
</tr>
<tr>
<td>4. El agua no proviene de red pública de agua potable</td>
<td>4. Pozo negro</td>
<td>4. Tina o ducha, sin agua caliente</td>
<td>4. La vivienda no dispone de electricidad</td>
</tr>
<tr>
<td>5. Con llave dentro de la vivienda</td>
<td>De uso compartido (con otras viviendas)</td>
<td>5. No tiene</td>
<td></td>
</tr>
<tr>
<td>6. Con llave dentro del sitio, pero fuera de la vivienda</td>
<td>1. W.C. conectado a alcantarillado</td>
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<tr>
<td>6. Por acarreo</td>
<td>2. W.C. conectado a fosa séptica</td>
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<td>3. Letrina sanitaria</td>
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<td></td>
<td>4. Pozo negro</td>
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<td></td>
<td>5. No tiene (eliminación a campo libre)</td>
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**DECLARACIÓN:** Declaro que los datos proporcionados son legítimos y asumo la responsabilidad por ello.

FAM 1 (__________)  
FAM 2 (__________)  
FAM 3 (__________)  
FAM 4 (__________)
### SECCIÓN 4: IDENTIFICACIÓN DE LOS RESIDENTES (Todos)

<table>
<thead>
<tr>
<th>No de orden</th>
<th>Jefe de Familia</th>
<th>Apellido Paterno</th>
<th>Apellido Materno</th>
<th>Primer Nombre</th>
<th>RUT - RUN o Cédula de Identidad con digito verificador</th>
<th>Fecha de Nacimiento Día/Mes/Año</th>
<th>Sexo</th>
<th>Relación de Parentesco</th>
<th>Familias</th>
<th>Hogares</th>
<th>Paresía</th>
<th>Categoría Ocupacional</th>
<th>Monto de Ingresos (en pesos)</th>
<th>Periodicidad Ingreso</th>
<th>Permanencia Trabajo</th>
<th>Ingresos secundarios</th>
<th>Subsidios monetarios (Todos)</th>
<th>Años de estudio aprobados</th>
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</table>

### SECCIÓN 8: PATRIMONIO JEFÉ DE FAMILIA Y/O SU PAREJA

**FAMILIA No.**

Para cada familia que habita en la vivienda indíque la situación bajo la cual ocupa el sitio.

1. Sitio propio, sin deudas.
2. Sitio propio, con deudas atrasadas.
3. Sitio propio, con deudas atrasadas.
4. Arrienda el propietario del sitio sin pagos atrasados.
5. Usan el sitio, pero no creen que pueden ser desalojados en los próximos 6 meses.
6. Usan el sitio, pero si creen que pueden ser desalojados en los próximos 6 meses.

¿La familia tiene algún televisor que funcione?

1. Tiene TV en colores
2. Tiene TV en blanco y negro
3. No tiene TV.

¿La familia tiene refrigerador que funcione?

1. Si tiene refrigerador
2. No tiene refrigerador

¿La familia tiene calefón o termo para calentar el agua?

1. Si tiene calefón o termo
2. No tiene calefón o termo
CHAPTER 4
SOCIAL EXCLUSION IN URBAN URUGUAY
Judy L. Baker

INTRODUCTION

In many developing countries the characteristics of the urban poor go beyond the traditional definition of poverty. While the latter generally refers to the lack of access to material resources, there are other factors which are linked to poverty. In the case of Uruguay one of these factors is an increase in the perception among the poor of exclusion from the rest of society. While this group only represents a small proportion of Uruguay’s total population, the phenomenon is of relevance to policy makers given demographics, and the cyclical nature of poverty. While fertility rates in Uruguay are generally low, they are substantially higher among the poor with approximately 40 percent of Uruguayan children now born into poverty, raising concern for the future.

The concept of social exclusion is defined in the literature as a multidimensional process which weakens the links between individuals and the rest of society (ILLS/UNDP). These links can take on an economic, political, socio-cultural, and geographic perspective. The economic dimension refers to processes that hinder individuals from gaining financial resources through labor markets, credit and insurance markets, basic services, and land, thus causing them to be poor. The political dimension of exclusion refers to individuals lacking the ability to enable them to exercise their legal freedoms and participate in decision-making. Political exclusion particularly affects the poor as they do not have the same access to education and information which would empower them to take full advantage of their rights under the law. The social-cultural dimension of exclusion is linked to the isolation of specific groups through education, language, and ethnic practices. Finally, the geographic component refers to the negative effect of location externalities on individual attributes. The more dimensions by which a person is excluded, the more vulnerable this person becomes.

In Uruguay, the process of social exclusion is a relatively new phenomenon and is particularly visible given that the country has traditionally been characterized as a homogeneous society with the most equal distribution of income in Latin America. There

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24 This work was prepared in the context of a World Bank study entitled, "Maintaining Social Equity in a Changing Economy" (World Bank Report No. 21262). The field work on social exclusion was carried out by a team led by Patricia Reynoso and Claudia Romano. The quantitative work on polarization was carried out collaboratively with Luisa Corrado and Melvyn Weeks. Edmundo Murragarra carried out work on vulnerability, and helpful comments were received on the various stages of the paper by Carine Clert, Shelton Davis, Norman Hicks and Quentin Wodon. For comments, please contact jbaker2@worldbank.org.
is only one small ethnic group (Afro-Uruguayans) representing 3-5 percent of the population, and generous welfare policies over the past decades have ensured that most Uruguayans receive access to basic health, education and other social services. Historically, city neighborhoods were quite heterogeneous, with households of different income levels living side by side and sharing the same public space. This integration provided a social cohesion between individuals of different cultural and socio-economic backgrounds. It also provided wider social networks (for job search, etc.), the presence of adult role models for youth coming from more disadvantaged families (those without stable employment or educational attainment), and better opportunities for social mobility.

The emergence of a ‘new poor’ resulting from job losses during the recessions in the 1990s and other structural changes in the labor market, has likely contributed to an increasing segmentation in Uruguay society. Many of these individuals have left their residences in middle class neighborhoods in the center of Montevideo where rents and utility bills are high, and have moved into one of the growing marginal neighborhoods surrounding Montevideo and other urban areas. They have also lost their access to the extensive social benefits linked with formal employment. The marginalization may be made worse by continuing migration from the poorer rural parts of Uruguay to the major centers, with these people, too, settling in peri-urban locations. Together, these movements appear to have contributed to a fragmentation within Uruguayan society between the poor and non-poor as these neighborhoods are often geographically isolated, have high levels of crime and violence, low levels of services, little public space, and generate an area stigma which affects access to labor markets and social networks.

To analyze this process, both quantitative and qualitative techniques have been used. The paper is organized to demonstrate how those techniques were used and integrated. Accordingly, Section II presents the quantitative analysis related to geographic polarization, and the identification of neighborhoods and population groups vulnerable to exclusion used in the qualitative work. Section III presents the methodology and findings of a qualitative study carried out in poor marginal neighborhoods looking at the processes of social exclusion from the perspective of labor markets, access to services, and access to social networks. Section VI concludes.

**Quantitative Analysis**

**Methodology**

Given the multi-dimensional nature of social exclusion, and limited data availability, it is difficult to analyze the phenomenon quantitatively. Quantitative tools were, however, used to the extent possible. The first approach looked at changes in the spatial distribution of the population and the effects on income distribution. The second approach was in the identification of neighborhoods and population groups vulnerable to exclusion.
**Box 4.1: Methodology for the Quantitative Analysis: Polarization Analysis**

For each individual and each period we have information on income and area of residence. If $y$ denotes income, $\bar{y}$ denotes mean per capita income over all regions and $\bar{y}_r$ mean per capita income for region $r$, total ($TS'$), within ($WS'$), and between ($BS'$) sum of squares given by:

$$TS' = \sum_{i=1}^{m} \sum_{r=1}^{R} (y_{ir}' - \bar{y})^2$$
$$WS' = \sum_{i=1}^{m} \sum_{r=1}^{R} (y_{ir}' - y_{r})^2$$
$$BS' = \sum_{r=1}^{R} (\bar{y}_r - \bar{y})^2$$

where $TS' = WS' + BS'$.

Based on the above, the proposition for the conditions which characterize polarization of individuals along geographic lines between periods one and two are:

i) $BS'^2 > BS'$ where between-area variance is increasing

ii) $WS'^2 < WS'$ where within-area variance is increasing.

An alternative is to decompose a standard inequality measure such as the Theil index into within and between area components. This is the approach used here (e.g., in table 4.2 below), with a correction to take into account the fact that the population size in each area is not the same. Details on the methodology are provided in Baker et al. (2000).

*Source: Author*

**Polarization analysis.** The process of geographic polarization, which appears to be fundamental to the exclusion process, is characterized by examining the distribution of area-based incomes using the share of area and quantile using the share of area and quantile based population (relative to national) as the reference distribution, and examining the within-area individual incomes relative to the income of the area. Income data are used because other measures of welfare such as consumption expenditure are not available. The data set used is the Continuous Household Surveys for 1989, 1994, 1996. The analysis is carried out at the level of census section, or an equivalent neighborhood-level variable.

**Identification of neighborhoods and population groups vulnerable to exclusion.** The first step was identifying neighborhoods and population groups vulnerable to exclusion using data from the 1996 Census. The quantitative indicators included a set of human and social capital variables: average educational attainment of household members (over age 20); socio-economic composition of the household (job type classification); percentage of teenagers that neither work nor study in the community; percentage of single teenage mothers; and drop out and repetition rates for children in the household. These indicators, which are a subset of those used in a recent study on marginality, were selected given that the characteristics were closely linked to the definition of the characteristics of social exclusion which emerged from the first phase of the qualitative study. In order to capture the multi-dimensionality of social exclusion, it was necessary to combine a number of different variables. With the scores based on the indicators above, neighborhoods in Montevideo and the metropolitan zone were then ranked into high and low risk areas. The table below provides the average criteria for the classification. Of the neighborhoods in Montevideo, thirteen, or approximately 30 percent, were ranked as high risk.
Table 4.1: Characteristics of High and Low Risk Urban Neighborhoods

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Educational Attainment (years)</th>
<th>Socio-Economic composition (% with ‘high status jobs’)</th>
<th>Inactive Male Teenagers (%)</th>
<th>Single Teenage Mothers (%)</th>
<th>Child dropout, repetition (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High risk</td>
<td>6.9</td>
<td>13.9</td>
<td>17.6</td>
<td>11.7</td>
<td>39.1</td>
</tr>
<tr>
<td>Low risk</td>
<td>10.1</td>
<td>40.4</td>
<td>6.7</td>
<td>3.6</td>
<td>18.8</td>
</tr>
</tbody>
</table>

Source: Author

This information was then combined with data on unsatisfied basic needs (mainly infrastructure), rates of unemployment, and incomes which narrowed the identification to ten neighborhoods considered most critical (including two from the metropolitan zone). Six were then selected for the fieldwork, in part due to the presence of NGOs to facilitate the coordination of the rapid participatory assessment. The final selection of neighborhoods includes Bella Italia, Casavalle, Cerro, Rincon de la Bolsa, Barros Blancos, and Paso de la Arena (See page 74).

**Geographic Polarization**

The clustering of the poor in marginal areas appears to be a key factor in understanding the process of social exclusion. Along the lines of the findings of Quah (1997) based upon a study of the evolving distribution of incomes across countries, the distribution of individuals along income and geographical dimensions may result in a polarization effect with a clustering of poor people in low income areas and of wealthier individuals in upper income areas. This results in a bi-modal distribution, where the modality has a geographical expression. More generally, if more than two peaks emerge, a social stratification process may be detected. While convergence studies emphasize the between region component of differences in income distributions, polarization depends upon both between and within region distributions.

Other literature related to spatial segmentation comes from the U.S. looking at the social consequences of ‘neighborhood effects’ in urban areas, particularly on youth. Most of the studies show that geographic or neighborhood clustering by socioeconomic group can have some effects on outcomes such as children’s life chances. For example the U.S. Department of Housing and Urban Development has explicitly encouraged local housing agencies to promote mobility and deconcentration of poor families among recipients of the Section 8 tenant based assistance program based on evidence that the concentration of poor families in high-poverty and high-minority neighborhoods is bad for the families and the communities in which they live (Turner, Popkin, and Cunningham, 2000). The Section 8 Program provides subsidies (approximately 70 percent of actual cost) to low-income families for rent in moderately priced housing.

Ellen and Turner (1997) provide a comprehensive review of the empirical evidence on how neighborhood environment may affect individual behavior and outcomes, summarizing that a strong neighborhood environment can discourage or sanction disruptive behavior by individual residents. Case and Katz (1991) also find that for inner-city youths in a tight labor market (Boston in early 1989), neighborhood effects, or the extent to which neighbors influence youth, do exist. Residence in a neighborhood in
which many other youths are involved in crime, use illegal drugs, or are out of work and out of school is associated with an increase in an individual's probability of the analogous outcome even after controlling for a variety of family background and personal characteristics.

Jencks and Mayer (1990) offer a different view, looking at both how much effect the social composition of a neighborhood or school has on children's life chances, as well as family background, measured by five outcomes: educational attainment, cognitive skills, criminal activity, sexual behavior, and economic success. They conclude that family background plays a greater role than neighborhood effects, offering two tentative hypotheses: i) when neighbors set social standards for one another or create institutions that serve an entire neighborhood, affluent neighbors are likely to be an advantage; and ii) when neighbors compete with one another for scarce resources, such as social standing, high school grades, or teenage jobs, affluent neighbors are likely to be at a disadvantage.

In the case of Uruguay, data are not available to measure neighborhood effects on individuals, but it is possible to analyze changes in the spatial distribution of income groups which will help to determine if indeed polarization is taking place. This analysis is possible at the level of census sections, or neighborhood clusters for the period 1989-1996. To characterize these changes, inequality is decomposed into measures of within and between area income inequality using the Theil index (see box 4.1).

In comparing 1996 with 1989, the process of segmentation shows an increased sorting of individuals in the lower deciles both in Montevideo and in the interior urban, and within the disaggregated neighborhood clusters (census sections) particularly in Montevideo.

When looking at a cross-sectional slice of the first two deciles, polarization of the lower income groups is observed for Sections (or neighborhood clusters) 10, 11, 13, 16, 17, 21, and 99 in Montevideo, and in the interior, for Section 25 (Artigas) in northern Uruguay. For Montevideo, the within-area inequality measure (Theil index) falls from 1.621 in 1989 to 1.596 in 1996, and the between area inequality increases from 0.081 to 0.116. Decompositions for the neighborhood clusters in Montevideo show that for most of the low income areas in table 4.2, there was a fall in the within area inequality, again indicating a clustering of households by income group. For example in Section 11, inequality fell from 0.84 in 1989 to 0.77 in 1996. Over the same period, average per capita household income for this area fell by approximately 12 percent and the standard deviation by 15 percent. At the same time, the between-area inequality index was negative for all the neighborhood clusters in table 4.2 implying that the distance between the actual income distribution and that predicted based on population shares is increasing. The results also show that the level of polarization is greater for poor areas, indicating that polarization is not symmetric -- poor individuals are clustering more, but the higher income areas still have a higher income variance and more inequality.

Income is based on per capita household income in 1989 values deflated using the inflation rates based on the annual CPI.
Table 4.2: Spatial Changes in Montevideo by Neighborhood Clusters

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These findings confirm that the polarization along income and geographic lines is occurring and likely has contributed to the exclusion process. This also demonstrates that the aggregate measures of inequality (which only changed slightly during the 1989-1996 period) appear to mask the more significant between and within area changes in inequality at the neighborhood level. If the literature on neighborhood effects in the U.S. is relevant in the Uruguyan context, these findings can have potentially negative social consequences for youth. There are also potential implications for Uruguay’s public housing policies which tend to cluster low income individuals together.

Characteristics of Marginal Neighborhoods

As discussed above, the neighborhoods and population groups vulnerable to exclusion were first selected a set of human and social capital variables from the 1996 Census. Marginal neighborhoods can be classified into two types of areas: “asentamientos irregulares” or irregular settlements (slums) largely settled by the ‘new poor’ in recent years, and ‘cantegriles’ or shanty towns which have been in existence for a long time and are home to the chronic poor.²⁶ Both types of marginal neighborhoods can be characterized as follows:

- Zones with high concentration of unsatisfied basic needs (including low quality housing);
- Low levels of education in the household and high percentages of school dropout and repetition;
- High unemployment and labor instability;
- Gender discrimination;
- Territorial isolation and area stigma;
- Problems of insecurity and violence.

²⁶ The term Cantegril for the neighborhoods originated as a form of humor as it refers to an exclusive night club in the wealthy resort town of Punta del Este.
As one woman in Casavalle said during the field interviews, "Now the neighborhood is filled up horribly with people, there are too many. What happens is that people that have lost their jobs can't pay the high rents, they have four or five children; and no matter what kind of little job they may have, they can't pay so they have to find a little piece of land to make a little house..." And a woman from Paso de la Arena, "You take some lands, they are sold without any legality whatsoever. The only thing you pay for is the tranquility that maybe you can build, and maybe the landlord can provide water..."

**Irregular settlements.** The number of irregular settlements has increased throughout the country, particularly in Montevideo where the estimates are 30,000 households or 122,500 individuals. This represents about 12 percent of the city’s population (INE, 1999). The increase in Montevideo, where the majority of the settlements are, was estimated at about 10 percent per year between 1984 and 1994. Most of these settlements are located peripheral areas forming a belt around the city.

Irregular settlements are characterized by social and economic isolation, irregular land ownership, and low standard sanitary and environmental conditions. Many of the residents are squatting on land which is not regulated. Because the neighborhoods have evolved in a relatively short span of time, they do not have sufficient social and economic infrastructure such as sewage, or roads (the poor road conditions are particularly problematic for public transportation and garbage collection). The population in these settlements have come from many different areas.

The only available survey in these areas, from 1994, showed that over seventy percent of residents came from other neighborhoods. Fifty-seven percent came from houses or apartments, indicating that it is likely that their living conditions have significantly deteriorated. Half of the residents report having moved to the settlements due to economic difficulties, 40 percent came from ‘cantegriles’, the majority (86%) are less than 41 years old, and have a high number of children under 10 (33.5%) in relation to the total population (18.5%). Housing is generally overcrowded, with over one half of the households having five or more inhabitants. About 40 percent of those over 12 are unemployed, and those who do work are employed as domestic workers, laborers, street vendors, and garbage collectors.

Of the settlements there are three categories. The first is those settlements that have been around for 5 years or more with somewhat more established housing and services such as electricity and water. The second group have been inhabited for 1-2 years, houses are mostly of wood, or sheet metal. Most have electricity and water in the house. The third type of settlement are those that are most recently occupied, within several months. In these settlements, inhabitants generally live in precarious housing with few services. Sanitation services, which are supposed to be provided by the municipalities, have been particularly neglected. Housing has been self-financed. Of the settlements, the services in urban areas are slightly better than in the semi-urban zones.

**Cantegriles.** The conditions in the cantegriles are generally worse than the irregular settlements, considered to be areas of extreme poverty. Housing is made of scrap materials such as wood, nylon or carton, and very small. The cantegriles are
predominately inhabited by ‘hugadores’, who collect and sort garbage by horse and cart around the city in search of recyclable materials and food. The neighborhoods have few services and sanitation is a major problem. Many residents have been born there as it is very difficult to move out. Some of the cantegriles can be found in the neighborhoods of Aparicia, Saravia, Isla Gaspar, and Nuevo Paris. Cantegriles can also be found within the irregular settlements, such as Casavalle, where residents classify these areas the most isolated and vulnerable (Katzman, 1999).

**Vulnerable Groups**

From the quantitative and qualitative data mentioned above, six groups emerged as particularly vulnerable to exclusion among the poor as they face risks beyond that of low income levels. Other factors which can affect household and individual vulnerability are access to housing and other physical assets, human capital, income diversification, links to networks and formal safety nets (table 4.3). As a share of the total population, they are relatively small – ranging from about 2 to 10 percent – indicating that with few resources and the ‘right’ interventions, it would not be difficult to target appropriate assistance to these groups. This section describes the nature of the risks that these vulnerable groups face and the kinds of programs which would be beneficial.

*Children.* Poor pre-school children face two major social risks: mortality (especially among infants) and stunted early development. While these risks are directly related to the living conditions of the household, leading indicators include mortality rates and pre-school enrollment. The difference in enrollment rates between poor and non-poor is dramatic, with more than twice as many non-poor children enrolled in preschool than the poor. Preventive measures include maternal-infant health programs, and increased coverage of early child development programs (or pre-school institutions). Risk coping strategies include care of malnourished children through feeding and other nutritional programs.

Among poor children between 6 and 11 years (typically primary school age) the major risk is poor quality of education and poor nutritional status that affects their cognitive abilities. Leading indicators include household welfare, enrollment rates, and repetition rates. Nutritional and anthropometric indicators are also relevant but Uruguay does not include these in their standard household surveys. Risk indicators differ significantly between the poor and non-poor. In Montevideo, 46 percent of the children in poverty have at least one unmet basic need, as compared with 9 percent of the non-poor. In the urban interior, the corresponding proportions are 62 percent and 10 percent. Repetition rates are high in Uruguay, especially in the first grade and in marginal areas (not available by poor and non-poor). Preventive measures include school improvement programs to encourage attendance and reduce repetition. Coping strategies include

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There are six indicators of basic needs satisfaction corresponding to different dimensions of socioeconomic status: 1) type of dwelling; 2) *hacinamiento* (crowded dwelling); 3) access to drinking water; 4) available sewage; 5) school attendance; and, 6) sustainability of the household. An aggregate indicator (Total) takes the value of one if any of the above is different from zero (there is any unsatisfied basic need).
remedial education and programs to improve the nutritional status of the children and their learning capabilities.

For the 11-14 age range which corresponds to the basic cycle of secondary education, the main risks are weak human capital formation mainly due to high drop-out and repetition rates (constant across grades), partially carried from primary school. About 44 percent of poor children aged 13 and 14 were still in primary school, as compared with 14 percent of the non-poor. Enrollment shows differences as well: 77 percent for poor and 96 percent for non-poor in Montevideo. These risks can be reduced through improved education, and programs to reduce repetition and drop-outs such as conditional transfers. Coping strategies include remedial education.

Inactive Youth, Pregnant Teenagers. Poor youth between 15 and 18 years are confronted with another set of social risks. Low-quality education is a major problem, evidenced by low enrollment, and very high repetition and drop-out rates. As a result of the lack of skills, unemployment rates are very high. Dropping out of school, not looking for a job, not finding one if they look for, and finally inactivity, is prevalent and increases exposure to violence, drugs, teenage pregnancy and street life. In Montevideo, inactivity among the poor between 15 and 24 is three times that observed for the non-poor. Risk prevention includes school scholarships and other transfers tied to school attendance, programs on family planning and reproductive health, and employment training programs. Risk mitigation includes street children programs as well as employment training.

Unemployed (particularly female headed households and male adults). Among vulnerable individuals between 25 and 59 years, unemployment and underemployment are the major risks for them and their dependents. Within this group, single female headed households, and males aged 40-50 are particularly vulnerable. Unemployment rates for the poor in Montevideo and the interior are about 3 times that of the non-poor. Though the rate of female headship is not different between poor and non-poor, a detailed analysis with households of two or more members show that these households are worse off. Risk prevention (and coping) strategies include extending social benefits to informal workers, and providing opportunities for day care facilities for single mothers and improving micro-enterprise development opportunities for the unemployed.

Elderly women. While Uruguay’s social insurance covers a large proportion of the population, there is a small subgroup of those who are not formally affiliated with the social security system. Elderly women in poverty, specifically particularly widows with no children are particularly vulnerable as they also do not have informal safety nets to provide assistance for them (Bonino and Espino, 1996). This group is isolated, and many are in fear of their personal safety.
Table 4.3: Characteristics of Urban Vulnerable Groups

<table>
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<th>Vulnerable Group</th>
<th>Characteristics</th>
<th>Share in poverty</th>
<th>Population share</th>
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| Children in poverty (0-15 years) | - Often from large families and do not receive adequate nurturing or parental care.  
- Very small proportion are street children who may not live on the street, but they spend large amounts of time there. Exposed to crime, violence and drugs.  
- High absenteeism, repetition and drop out rates, difficulties in learning. | 40.8 | 9.5 |
| Inactive Male Youth, 15-24 years (not studying, not working and not looking for a job) | - School dropouts, few skills.  
- Often vulnerable due to inadequate parenting and guidance, unstable home environment, low self-esteem, peer pressure and domestic violence.  
- Inaccessibility to labor markets due to lack of skills, social networks, and discrimination by area and physical appearance.  
- Exposed to street crime, drugs.  
- Those in semi-urban areas worse off. | 44.1 | 2.0 |
| Teenage mothers (15-19 years); | - Often see pregnancy as an escape, way to change role in society.  
- School dropouts, high rates of unemployment, few skills.  
- For illegitimate children, access to health care, legal rights limited.  
- About one-third have had previous pregnancies.  
- Problems of loneliness, isolation.  
- Day care limited by hours, and age requirements. | n.a. | n.a. |
| Female household heads with low income, low educational attainment, and in precarious situation, between 30-50 years old | - Burdens of single parenting, and single income.  
- Time conflict between work and children problematic for adequate day care and sufficient parental attention.  
- Those in semi-urban areas worse off.  
- Extended families can play important safety net. | 61.5 | 3.3 |
| Unemployed male adults, 40-50 years old | - Most are displaced workers, very difficult to reenter the labor market.  
- Retraining opportunities are limited.  
- Age discrimination.  
- Severely affects self-esteem and social role as head of the family. | 39.2 | 1.0 |
| Women 50 years or older, especially poor widows, no children. | - Most vulnerable are those who lack formal or informal safety nets.  
- Problems of safety.  
- Those in semi-urban areas worse off. | 9.9 | 5.5 |

n.a. Not available because the sample is too small

Source: Data from Continuous Household Survey, 1999
Afro-Uruguayans. In addition to the groups mentioned above are Afro-Uruguayans, representing roughly 5 percent of the total population. While little data are available by ethnic group, one study cited by the Inter Press Service, indicated that Afro-Uruguayans have higher unemployment rates, lower wages, and lower education levels than white Uruguayans.\textsuperscript{28} The Afro-Uruguayans were concentrated in basic occupations such as manual laborers and domestic workers. There was some apparent narrowing of the gap in education levels for the 25-39 cohort, suggesting some improvement for the younger generation.

**Qualitative Analysis**

The findings of the qualitative analysis are presented here by each thematic area. A few direct excerpts from the field interviews are included to provide some of the perceptions from those in the poor neighborhoods.

*Social exclusion and Labor Markets.* The difficulties in accessing labor markets by the vulnerable groups can be enormous. The first major constraint to finding employment is a lack of skills (Aguirre, Buxedas, and Espino, 1999). Many of the individuals identified as vulnerable have dropped out of school, and have very low skills levels or work experience. This makes entry into the labor market very difficult. Second is the lack of social networks. Most unskilled jobs, both in the formal and informal sector, are filled through informal family and social networks. For those living in marginal neighborhoods, these networks are weak, and do not lead to contacts which can help individuals find employment. The few ‘formal’ job search resources that do exist in the country are generally not accessible by the urban poor. And third is the issue of stigma. Individuals from those neighborhoods known to be poor or have high levels of crime and violence are often excluded due to perceptions by potential employers. Other areas where stigma can prevent access to jobs include physical appearance (particularly teeth), and by age (older men, youth). As one man from a neighborhood in Cerro said, “The young are discriminated against, because if you live from swamp on in, then you are told no (for work or education)...They discriminate against you with one look. If you’re from the hills, it’s like having a rejection sign on your forehead...” And from a man in Rincon de la Bolsa, “When we say we’re from around here, they don’t take us any more..”

For those who do work, incomes are low, with few benefits, and working conditions are unstable. Many individuals take on odd jobs as they find them, which require few skills. Among men, construction (seasonal) was the most dominant form of employment, and for women it was domestic work either in private homes or for cleaning services). Others also find temporary work in the port, or during the various agricultural harvests.

Many of the poor work in informal employment where they are not protected by any social benefits, nor by labor legislation. As cited from a man in Cerro, “Most men work odd jobs and the women work as house servants...most of the jobs are informal, and provide no social benefits...” Many have little knowledge or access to information

\textsuperscript{28} This study was carried out by the National Statistical Office in 1997. See http://www.oneworld.org/ips2/june98 for Inter Press Summary.
systems, legal rights, support services, and some government programs, all which contribute to the exclusion process. Due to the lack of opportunities, some become involved in illegal activities such as drug trading, or robbery. Examples of worker abuse such as poor conditions, overtime with no compensation, and sexual harassment appear to be frequent. Finally, there are problems of child labor in informal activities to support family income. Children may go to sell items in the street, clean in the market, or beg. Child labor can lead to physical and mental health problems, and school desertion. As expressed by a woman from a neighborhood in Casavalle, "The children don't go to school because it is not important for the parents. Why should they go to school if they are not going to be able to find work? The parents take the children with them so they can help pick through the trash, or they send girls to clean in the little markets so they can bring home some food."
The qualitative study was carried out in three main phases (Reynoso and Romano, 2000). Phase 1 involved consultations with major stakeholders through workshops and in-depth interviews, direct observation of location and problems, and design of hypothesis and methodological strategy. The second phase included the site selection and analysis, and selection and analysis of local participants (institutions, associations, resources and individuals). Finally, the team build-up, training, and data collection was carried out in the third phase. Data collection methods included focus groups, community (neighborhood) for a, interviews with key informants, direct and participatory observation, area history and trajectory, and social maps (how the neighborhood is drawn up, secure or insecure areas, housing, internal territorial division).

The interactive data collection included 30 focus groups, 25 individual interviews, and 8 group interviews. These were divided up among the six neighborhoods, with representation from the various subgroups, each covering one of three thematic areas. For each of the focus groups, participants were randomly selected from the community. The subgroups were categorized by six vulnerable groups identified in Phase I: children, inactive male youth, teenage mothers, female household heads with children, unemployed male adults, and female household heads over the age of fifty living alone. Each of the focus groups then concentrated on one of three topics: employment, access to services and resources, and access to social networks. The focus of each group discussion was carefully selected to ensure that information would be collected on each topic from the various vulnerable groups. For example, the topic of employment was discussed not only from the perspective of unemployed male adults and unemployed youth, but also from female household heads and children.

The field teams were comprised of trained social and community workers from the NGOs already working in marginal neighborhoods. The teams were then mixed based on skills and to ensure that some individuals carried out the field work in neighborhoods other than where they are working to eliminate bias in the discussions. The field work lasted approximately one month.

The format of the individual interviews was the same for all those interviewed. For the group work, the format and tools used varied according to the composition of the group. For example, a variety of interactive games which were appropriately designed for the group, were used to introduce group members, to elicit responses from the participants. Team members traded off in the facilitation of the group discussions. The data collected through the focus groups and interviews was then analyzed by the teams using content analysis. The classification system was based on that used to structure the interviews, following the main themes of employment, access to services and resources, and access to social networks.

Among the information collected were participants views on: (a) Employment: Type and place of employment, job security, level of remuneration, job search networks and methods, obstacles to finding work, reasons for not looking for work, perceptions of unemployment, coping strategies for the unemployed; (b) Access to services and resources: type of services and resources available in community, location, ease or difficulty of accessibility, identification of services that are lacking, characterization of the quality, equality of access by gender groups; and (c) Access to social networks: identification and characterization of institutions and organizations within the community, type of activities organized by community members, characterization of those activities and participants, conflicts in the community, methods of resolution, elements of cohesion, identification of things that make participation in community more difficult/easy.

Source: Author
Social exclusion and Access to Services. Those in marginal neighborhoods do not have the same access to most basic services as the rest of the population, both in terms of quantity and quality, which has contributed to the exclusion process. A resident in Casavalle characterized her experience, "We are isolated, they (the authorities) have forgotten us..." As discussed earlier in the first part of this paper, general access to water and electricity is high (through both legal and illegal sources). Access to sanitation, particularly in ‘cantegriles’ is lacking and presents a risk to public health. Access to roads is also problematic, particularly for public transport offered by the municipalities and local governments. The poor urban road conditions combined with the threats of crime and violence, often prevent public buses from entering into the marginal neighborhoods, particularly in the evening. This further exacerbates problems in accessing jobs, schools, health clinics which may be of traveling distance. Access to water seems to be a problem for some in the newer settlements, mainly in the metropolitan area (e.g. Delta del Tigre), where residents report that the local authorities have cut the public access to tap water in order to direct these consumers to new services for a fee.

Social services are also limited in many marginal neighborhoods. In health, the population has expressed problems of low quality or non-existent polyclinic services, and lack of coordination in the delivery of services between central and local governments. Residents generally cannot access other, higher quality, types of health care due to the cost nor can they belong to the various privately run mutual services which either are based on formal employment or require unaffordable contributions and co-payments. The polyclinics in marginal neighborhoods tend to have limited services, lack staff, medicines, and supplies, and require long waiting periods to be treated. Furthermore, to receive treatment a health card, issued to the poor by a means test, is required. To obtain this card, individuals must go through several procedures to apply which can be problematic as residents report that they have difficulty in gaining access to information about how this is done. About 6 percent of the poor have not obtained their health cards.

During several focus groups with women, they complained of limited access to pre and post-natal care. Few of the policlinics have obstetric care and thus pregnant women must travel to those centers which will serve them, often some distance away. In order to ensure an appointment, one must arrive early to get a place in line (as early as 4:00 a.m.). These lines are outdoors so if it is raining the conditions are worse. The clinics are not open in the evening making it difficult for working women. And finally, if specific medications are needed, they have to be obtained in central hospitals which requires purchasing a ticket for the health co-payment and transport costs. Additional consultations require more tickets.

The issues related to education services for those in marginal areas differ depending on the level of education, though the impact is greatest on children. At the pre-school level, coverage is low, particularly for younger children. Those facilities that do exist are again, limited to those in formal employment. While elementary school coverage is relatively high, the quality issues in poor neighborhoods are of particular concern. The schools tend to be overcrowded, infrastructure is dilapidated, and the levels of repetition and drop out are high. Violence in some schools is also a threat to both teachers and students. At the secondary school level, access is a problem. Students often have to travel some distance
to attend secondary school, though public transport is not always available. The quality of teaching and infrastructure are low, and repetition and drop out rates are even higher than in elementary school. Beginning at age 13, attendance rates for the poor fall dramatically. For the 15-19 age cohort, enrollment levels for the poor have dropped to just over 40 percent. The curriculum in secondary school is also considered somewhat irrelevant, as it does not adequately train students with the necessary skills to enter into the labor force. As a resident in Paso de la Arena said about their children, "When they used to go to school in front of the Palace (in a more central neighborhood), they had English and computers. Later when they came here, they had nothing. How do you explain to a child that no, in this neighborhood you can't. All those things that show up on television, they don't come here..." And from a mother in Casavalle, "After they turn fifteen, many kids can't continue because there isn't a high school in the area. So from that age on they have to pay for the bus, and many times they aren't fed well... There are many cases where children attend the public schools in a different neighborhood because of violence or some other reason.."

For those out of the education system, such as female household heads, inactive youth, teenage mothers, or unemployed adults, there are few if any opportunities for remedial education. This could provide enormous benefits through improved opportunities in the labor market, and secondary effects on dependent children.

Nutrition and other social programs are also scarce in the marginal neighborhoods. Accessing many of these programs requires an assistance card. NGOs and community based groups provide assistance through school cafeterias and local kitchens, though these services are not sufficient to reach the current demand. Teachers report that they try to give students a better balanced meal on Fridays and Mondays to compensate for the lack of adequate nutrition children receive in their homes on the weekends.

And lastly, access to security is considered problematic. An estimated 70 percent of delinquent activity in Montevideo occurred in the metropolitan area where the marginal neighborhoods are located. Residents report an increased level of insecurity due to violence, crime and corruption. They find the violence and insecurity threatening to their well being. This is also thought to have contributed to a progressive deterioration of social capital, a loss of reciprocity values and networks, and a weakening of mutual trust. As expressed by a woman in Paso de la Arena, "The other way to service is by stealing, by both men and women...They steal because they have nothing to eat..." And from the Casavalle neighborhood, "You always see the police running through the streets whenever there is a robbery, but I have never actually seen them do anything. They come into the neighborhood and you see them go past running. The problem is that there are too many kids with drugs, little kids, kids in the plaza with marijuana." "Here we have the worst crimes, the more violent ones among the youth associated with drugs."

Violence can erode the social, physical and human capital in a community by affecting the ability of formal and informal social institutions to operate, destroying physical infrastructure such as transport systems, roads, housing, through vandalism and creating fear for transport services to enter into communities at night, and deterring the use of
education services because of security risks to students, and pressures to become involved in gangs, or drugs.

While crime rates in Uruguay are relatively low, the level of concern and perception of insecurity among the population perceived to have increased as evidenced above. An opinion survey of the evolution of social problems carried out in 1995 (Katzman, 1996) shows that the percentage of those surveyed perceiving an increase in drug-trafficking was 87 percent; delinquency, 90 percent; drug addiction, 92 percent; and corruption, 83 percent. Another survey carried out in 1999 showed that close to 70 percent of those surveyed in Montevideo expressed little or no confidence in the police, and 66 percent in the justice system (UNDP, 1999). The population with possession of a firearm in the household has also increased dramatically. During 1996-1991, 19,219 new firearms were registered. It is likely that many more were not registered.

The perceptions of insecurity are particularly high in the marginal neighborhoods where crime and violence are a major threat to the well-being of residents and levels of social capital tend to be low. While in neighborhoods such as Paso de la Arena and Belvedere only 10-15 percent of residents report feeling secure, as compared to 60 percent in wealthier neighborhoods such as Carrasco and Malvine. Police services in the marginal neighborhoods are considered inadequate.

Social exclusion and Social Networks. Access to social capital and social networks, whether formal or informal, can provide an important link for individuals and groups to society, for both the poor and the non-poor, and serve as a coping mechanism against vulnerability. Social Capital can be defined broadly to refer to the rules, norms, trusts, obligations, and reciprocity embedded in social relations, social structures, and institutional arrangements in a society, all of which enable its members to achieve their individual and community objectives (Moser, 1999). Formal networks include public organizations, associations, churches, NGOs and charities providing some type of service. These services include community self-help, support of public services (schools, clinics), and assistance with advocacy. Generally, participation in the marginal neighborhoods is low, in part due to lack of knowledge of services, and in part due to a lack of initiative by the potential beneficiaries. This weak link exacerbates the exclusion process. Of those who do participate, women play a greater role. Across marginal neighborhoods, those inside Montevideo had a higher access to networks than in the suburban areas where very few NGOs were present, leaving the vulnerable groups with few social networks. Many of the organizations are somewhat unstable making it difficult to achieve results on collective actions. Those organizations involved in activities which have direct results on daily needs (e.g. schools, cafeterias) tend to have greater stability.

There are a range of non-governmental organizations (NGOs) and other civil society organizations (CSOs) groups involved in social development in Uruguay, with the estimated number of groups between 150-200. Close to 60 percent of financing for NGO and CSO activities comes from external donors, with the rest coming from Government and some, albeit small, private sector contributions. Most of the groups, approximately 90 percent, are concentrated in Montevideo and the surrounding area. There are several networks and a national umbrella organization which aim to provide some coordination
between groups. In some of the marginal neighborhoods, NGOs and CBOs may be the only organizations working in these areas. The organizations play an important role in providing benefits and advocacy for these excluded groups. Some of the main organizations have been quite effective in delivering Government social programs through formal contractual agreements. The Municipality of Montevideo is the main contractor, with 22 agreements registered in 1997. Many NGOs and CSOs in Uruguay are now rethinking their institutional role, particularly with regard to increased activity as executing agencies for local and national government programs, and in responding to changing social needs.

On the whole, the majority of NGOs and CSOs face constraints to performing effectively. This includes financial constraints, an insufficient number of qualified and permanent staff, and despite the existence of the NGO networks, a lack of coordination resulting in duplication of activities. There are also few programs which are monitored or evaluated which makes it impossible to assess how effective the programs are.

Informal networks include family, neighbors, friends, and enterprises. For the vulnerable, the nuclear family is the first resort in difficult situations such as loss of employment, illness, lack of food, or childcare. Family members can provide substantial support in accessing information and contacts for a job search, public services, or other opportunities. Secondary networks vary. In some neighborhoods they can be quite strong though in others, particularly neighborhoods with high levels of conflict and violence, networks are weak or nonexistent.

**Emerging themes.** A few additional themes came out of the consultations that are pressing problems which also contribute to the social exclusion process. The first is tension and conflict among neighbors. There are variable degrees of conflict, and the problem is particularly acute with groups of teenage males. Second, drug and alcohol consumption (mainly wine and marijuana) is also considered problematic in neighborhoods. Consumption is mainly associated with young males, though the consequences affect the quality of social and family relations. Third is the rise of psycho-social problems, such as depression, violence, and sexual abuse. And fourth, gender issues emerged in many of the focus groups. The perception is that public participation by women is restricted to certain topics (domestic, social), and that they have a lack of influence over community decision making. Opportunities in the labor market for women are limited to low paying, low skills jobs, and many women express a loss of self-esteem and confidence. Intra-family violence and abuse problems are also frequently mentioned by women during the focus group discussions. Prostitution and early teenage pregnancy are also problematic. As quoted from an interview with one girl in Bella Italia, "The girls prostitute themselves and then end up pregnant..."
Coping strategies. A number of coping strategies used by vulnerable groups emerged from the participatory research. Among them are the following:

- Occupying lands in shanty towns
- Precarious jobs
- Combing through garbage for useful items and food
- Raising animals (chickens and pigs)
- Illegal activity
- NGO and public feeding programs
- Churches
- Community organizations
- Family networks
- Neighborhood networks
- Sharing in childcare, food and cooking (with grandparents, neighbors)
- Odd jobs in construction, cleaning, gardening, and other manual labor
- Informal credit (in local stores)
- Sending children to work, beg
- Begging
- Stealing
- Occasional prostitution
- Drugs and Alcohol

Some of these coping strategies may alleviate aspects of the economic and psycho-social difficulties of poverty and vulnerability though they do not provide sufficient relief nor prevention. Government programs will continue to play the main role in preventing and mitigating risk for these groups.

CONCLUSIONS

This paper attempts to go beyond aggregate numbers of poverty and inequality to analyze the phenomenon of social exclusion in Uruguay. To do this effectively, both quantitative and qualitative techniques are used. Social exclusion is defined as a multidimensional process which weakens the links between individuals and the rest of society. One of the main aspects in this process in the Uruguayan context appears to be a geographic polarization among the population, or more specifically, the clustering of the poor in marginal areas. With the emergence of a ‘new poor’ resulting from recessions during the 1990s, many of these individuals have moved from their middle class neighborhoods in the center of Montevideo to one of the growing marginal neighborhoods in the periphery of the city. This has contributed to a fragmentation between the poor and non-poor and increase in income inequality between neighborhoods which is not captured in the aggregate data on income distribution. The clustering of the poor in marginal areas can result in a ‘neighborhood effect’ which may impact (negatively) on individual behavior and outcomes, such as children’s life chances.

The findings of this research point to several policy conclusions related to urban poverty and development in Uruguay and potentially the rest of Latin America. First, policies which prioritize improvements in access to quality basic services, particularly education, health, transportation, social assistance, more flexible land use policies, as well as public information for those in marginal areas could help to provide an important link to jobs and human capital development, and reduce some of the facets of social exclusion. New community based programs designed and implemented by neighborhood members based on specific needs, or expansion of existing community programs, could also help to reverse the marginalization process.
Second are policies related to housing. Policies that foster the maintenance of traditional integrated neighborhoods, or minimize the concentration of the poor in marginal neighborhoods, may mitigate the exclusion process. Such policies may not be politically popular among some, but would be deserving of further investigation.

Finally, the aggregate numbers on inequality appear to mask what is happening at a more disaggregated level such as the neighborhood. While income inequality for the country as a whole only shifted slightly during the 1989-1996 period, the within and between area changes were significant. Analysis of trends in income distribution in other countries may benefit from similar disaggregation as part of standard research on poverty and income inequality.
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