

EXECUTIVE SUMMARY

- 1. This report takes stock of the poverty situation in PNG and the consequent policy challenges amidst concerns of deteriorating economic and social conditions in the country ...** A number of recent assessments have described the social and economic situation in Papua New Guinea in stark terms as a country in the throes of a serious social and economic crisis. Responding, in part, to similar concerns, PNG's most significant donor Australia recently developed its Enhanced Cooperation Program (ECP) "to strengthen its engagement in Papua New Guinea". While concerns with the PNG situation are manifold, an overarching concern relates to the prospects for protecting the living standards of the population, especially the relatively poor population, in the short and medium term. In this setting, this Poverty Assessment report seeks to (i) provide an update on the state of poverty in country, and (ii) review policy issues and challenges in the two key areas of restoration of economic growth and the delivery of basic services, and (iii) assess key gaps in the currently available information base for poverty monitoring and evaluation.
- 2. The report interprets poverty broadly to include both the income and non-income dimensions ...** This broader notion of poverty is consistent with both the government's own conception as reflected in its recent Poverty Reduction Strategy as well as in the popular conception of poverty that comes through in participatory consultations.

State of poverty in PNG

- 3. Income poverty: There are indications that poverty levels have increased sharply in recent years, and are unlikely to climb down in the immediate future ...** Using a poverty line that allows for 2200 calories per adult equivalent per day and an allowance for basic non-food expenditure, the projections of poverty measures indicate that the proportion of population in poverty has increased from 37.5% in 1996 to about 54% by 2003. The trends are no different for the international poverty line of "\$1/day", using which the incidence of poverty is estimated to have risen from about 25% to just under 40% over the same period.
- 4. The key factor underlying the increase in poverty has been the contraction of the economy ...** GDP growth rate plummeted since the mid-1990s and still has not convincingly recovered. For most of the last 10 years, the economy has been contracting, and together with a population growth of 2.7% per year, in per capita terms the last decade has been a period of massive growth failure.
- 5. Education: Current levels of attainment are not high and there is limited evidence of improvement in recent years ...** According to the 2000 National Census, only 56% of the

population 10 and above was literate in year 2000, the proportion who had ever been to school is the same, and only 38% had completed grade 6. A comparison with the 1996 survey data (from the National household Survey and/or the Demographic and Health Survey) presents a mixed and confounding picture. There seems to have been a modest improvement in the proportion of those completing primary education (37% in 1996). However, the literacy rate (estimated at 51% in 1996) and the proportion of those who ever attended school (about 64% in 1996) seem to move in opposite directions, pointing to potential comparability problems between the NHS/DHS and the Census data. Overall, it is difficult to interpret the evidence as indicative of anything more than a modest progress in education outcomes during 1996-2000.

6. **Health: Current outcome and output indicators are low and there are signs of recent deterioration in health services ...** While there has been some improvement in demographic indicators between 1980 and 2000, progress has been slow especially in the case of indicators like life expectancy (54 years in 2000) and infant mortality (67 per thousand in 2000). There are further signs of a recent decline in outpatient visits per capita, and in several performance indicators related to maternal and child health. And HIV/AIDS is likely to increase the burden of disease in adults.

7. **There is a large rural-urban divide with regards to both income and non-income indicators ...** The case for greater attention to the rural sector is rendered urgent by the fact that practically every socio-economic indicator is significantly worse in rural areas. Moreover, while consistent data over time are limited, the available information does *not* suggest a diminishing gap between rural and urban sectors. On the contrary, for some indicators, such as those related to health, the gap is clearly widening.

8. **... and there are large disparities both across and within provinces.** Assessed in terms of five indicators relating to infant mortality, life expectancy at birth, overall literacy rate, the ratio of female-to-male literacy and the headcount index of (consumption) poverty, the results indicate that amongst the worst performers are the provinces of Madang, East Sepik and West Sepik which are below the national average in terms of all five indicators. Enga in the Highlands performs poorly in terms of all indicators except the headcount index. Gulf and Morobe are similar to Enga but have higher literacy rate than the national average; though for Enga the literacy rate is only slightly higher.

9. Similarly, with the help of the **Poverty Mapping exercise** and other data sources, notably the 2000 National Census, it is possible to map the income and non-income dimensions of poverty **at the district level**, thus helping us identify the poorest areas nationwide. It would be of considerable importance that future development policies factor in the regional dimension to protect and improve living standards in the “below-average” provinces, especially in Momase and the Highlands regions, and amongst the poorest districts within provinces.

10. **Restoration of economic growth and maintaining provision of basic services, especially in education and health, are the two principal challenges for poverty reduction in PNG at this time ...** Each of these challenges involves its own set of further issues, though several of them are equally relevant to both.

The challenge of restoring growth

11. **Restoring growth is more than a matter of reverting back to the conditions of the early 1990s ...** After negative GDP growth in 6 out of the last 9 years and negative per capita growth in 7 of those 9 years, the fundamental importance of restoring economic growth can not be over-emphasized. Yet, this may be more than a matter of reverting back to the economic conditions of the early 1990s when the country experienced positive growth. There are lessons to be learnt from past experience. While the agenda for restoration of growth for poverty reduction is large and complex, there are five areas that are arguably in need of urgent attention.

12. **Pattern of growth: The mineral sector has been a major source of economic volatility, and has contributed little to changes in poverty over time ...** Given that few of the poor depend on the mineral sector and that linkages with the rest of the economy are weak, its contribution to changes in poverty has been rather limited. Projections of poverty indicate that in contrast to the mining sector accounting for over half the decline in GDP growth since the mid-1990s, its contribution to the increase in poverty has only been about 14%. Projections up to 10 years ahead indicate that further expected declines in the mineral sector would also have only a modest impact on poverty.

13. **The limited contribution of the mineral sector to poverty reduction applies more generally to the resource sector as a whole ...** More generally, the results illustrate that the resource sector-dominated growth path that PNG appears to have followed over the past 30 years has not been particularly pro-poor. The extractive industry-oriented growth pattern has often come at the expense of government attention to the development of the non-mineral economy, and this in turn has inhibited poverty alleviation in PNG. Like the mineral sector, the forestry sector is another example of missed opportunities for poverty alleviation despite extensive resource endowments. Amongst other factors, the incorporated land groups (ILGs), for a variety of reasons, have failed to ensure equitable distribution and productive utilization of resource rents, pointing to the need for ILG reform or developing alternative mechanisms for the distribution of resource rents. It also reinforces the need to shift away from a resource-sector dominated growth strategy. While the mineral sector's contribution to government revenues and exports will continue to be important (though less so than it has been in the past), the country will need to increasingly look to its non-mineral economy for sustaining future growth and poverty reduction.

14. **Infrastructure: Investment in new and maintaining existing infrastructure (especially roads and transport) remains an increasingly important priority ...** The infrastructure in the country is in a state of increasing disrepair with significant implications for economic growth, service delivery and food security. Infrastructure spending could also be a feasible means of reaching the poor. The benefits to the poor could be further enhanced if infrastructure projects were implemented through labor-intensive public works programs exploiting their self-targeting character such that the relatively poor self-select themselves as participants in such works programs.

15. **“Law and order”: PNG’s “law and order” problem has become a serious development challenge ...** Criminal activity and social conflict have been on the rise in the country, spreading even to rural areas. The lack of employment and income-earning avenues, especially important for the youth (15-29 years) whose ranks swell at about 3% per year, is driving an increasing proportion of the labor force into the informal sector, the largest segment of

which (estimated to be as high as half in urban areas) comprises of ‘illegitimate’ activities. The link between crime and lack of economic opportunities also comes through in participatory assessments.

16. **... but an enduring solution would need to go beyond extra policing and strengthening of the law and justice system.** Apart from the direct social costs, particularly for women, the economic costs of crime have been enormous. Crime has been disruptive of economic activity (particularly detrimental to coffee production), has undermined investor confidence (leading to loss of production opportunities, such as, for the tourism industry) and has increased the cost of doing business. The ‘crime tax’ (security and theft cost) has amounted to 12-15% of turnover by recent estimates. While extra policing and strengthening of the law and justice system will help, a significant element of an enduring solution will lie in development itself, in particular through the creation of viable employment opportunities.

17. **Small and medium enterprises: Existing impediments to development of small and medium enterprises need to be removed to realize their potential for employment and income-earning opportunities in both the formal and informal sectors ...** In addition to the constraints imposed by deteriorating infrastructure and increasing crime, the private sector in general, and small and medium enterprises (SMEs) in particular, have been further hampered by a number of factors including: lack of access to affordable finance, legal restrictions, difficulties in accessing traditional land for commercial activities and the lack of an educated work force. The removal of these impediments will be critical for an alternative growth strategy.

18. **The agricultural sector: There is a case for greater diversification of the production of export crops and measures to address structural problems in the food crop sector.** While the cultivation of cash crops for an export market makes an important contribution to the livelihood of the rural population as well as the rural poor, the cultivators have faced declining terms of trade in recent years and remain vulnerable to periodic price shocks, suggesting the need for greater diversification. The development of the food crop sector, and the agricultural sector more generally, will also require measures to address a number of structural problems relating to limited access to markets and inputs, inadequate extension services, inadequate finance, and land tenure arrangements that inhibit agricultural investment.

19. **The challenge of implementing policies for restoring growth is more than just a matter of resources, although the resource environment has become more stringent in recent years, in part due to an increasing burden of debt servicing.** It is not that the problems and issues noted above have gone unnoticed by the government. Many of them are, for instance, noted in the government’s recent Medium Term Development Strategy for 2003-2007. What remains unclear, however, is whether there will be a sharp focus and decisive commitment that is needed to translate these noted concerns into policy actions that can be sustained over a period of time. An important concern is the productive utilization of resources. From this perspective, many of issues on the recent Public Expenditure Review and Rationalization (PERR) agenda – including civil service size and payroll reform; measures to restore the integrity of budget institutions and systems; improving provincial spending, budget management and accountability; and adjustment and prioritization of expenditures – are also part of a growth and poverty reduction agenda.

The challenge of service delivery

20. The discussion on the delivery of basic services is based on findings from a study of Public Expenditure and Service Delivery (referred to as the PESD study) that was undertaken as an integral part of the work for this Poverty Assessment.¹

21. **The PESD study focuses on the education sector though its findings have wider relevance ...** The problems that plague the education sector have close parallels in other sectors. The report presents some illustrative data for the health sector for which a limited amount of primary information was collected, but the study's inquiry into conditions promoting or impeding effective service delivery in education has broader relevance for other sectors in PNG, and beyond that for other countries too.

22. **Key findings ...** The education sector in PNG has had some notable achievements since independence, but there are significant problems related to school facilities and environment, school finances, teacher and student performance, and the administration of education.

School facilities

- School facilities are deficient in many respects (physical infrastructure, electricity, water, sanitation, access to other amenities and resources for teaching (textbooks for students, library, staff room).
- School closure and security issues are also a significant factor for many schools.
- Poverty and remoteness matter to school facilities, but not all the time. Similarly, agency type (church vs. government-operation) does not matter, but financial resources available to schools do make a difference.

School finances

- There are substantial gaps in financial data available at the school level reflecting limited accountability as well as low incentives for regular record keeping.
- Subsidies, fees and grants are the three main sources of revenue for schools, while teacher salaries are directly paid by the national government.
- However, grants are not a dependable source of revenue for the vast majority of schools.
- Subsidies are prone to the problems of uneven distribution, leakage (estimated at 16-29% for 2001), uncertainty and delays (estimated at about 3 months for the quarterly subsidies in 2001).
- There is considerable tolerance for non-payment of fees.
- There is no clear or consistent government policy on fees, best illustrated by the short-lived "free" education experiment during the election year of 2002.
- The experiment with "free" education in 2002 had some positive effects in terms of a large (4-fold) increase in subsidies at the schools, elimination of leakage, and reduction of delays.
- But it also exposed systemic problems related to the sustainability of the policy, confusion about national policy in a politicized environment, friction across different layers of government.

¹ There is a detailed PESD Report resulting from that work which should be read as a companion to this Report.

Teachers

- The effective supply of teachers is eroded by ghost teachers (estimated at 15% in 2002) and teacher absence (also estimated at 15% in 2002).
- Absence of teachers partly reflects poor incentives (e.g. delays in payment of teacher salaries), but greater parent and community participation significantly reduces teacher absence.
- Poor teacher motivation is also reflected in high teacher turnover and teacher shortages especially in poor or remote regions.

Students

- Parent and community participation and better school facilities improve student attendance, while teacher absence has a negative effect.
- Better school facilities also have a positive influence on student performance, as also do fees set by schools. The latter is partly indicative of a parental income effect on student performance, and partly of fees acting as a market-based accountability mechanism.

Education administration

- Provincial and district-level education administration fails to play an effective role, and the inspection system is inadequate.

Overall messages and policy implications

23. **These can be examined within the framework of client-provider-policymaker relationships ...** The analysis of effective delivery of basic services is a complex issue. For organizing the overall messages and policy implications emerging from this study, a simple framework of client-provider-policymaker inter-relationships can be utilized. According to this framework, the service delivery chain can be unbundled into the relationships between three sets of actors: the policymakers; the frontline providers of services; and the clients or citizens who are both the source of demand for services as well as their final destination as consumers. By this framework, relationships amongst the three sets of actors are important for understanding delivery of basic services.

(a) Client-provider relationship

24. **Parental participation and community involvement contributes to better service delivery.** The evidence summarized above indicates it does this by inducing lower teacher absence, lower leakage and higher student attendance.

25. **While there are impediments to the operation of the “market” link of accountability ...** The direct “market” link of accountability of schools (provider) to parents and students (client) is broken because of the system of subsidized education in PNG. Even setting aside the free education experiment, education in PNG – not unlike many other countries at a comparable stage of development – is heavily subsidized once publicly-paid teacher salaries are taken into account. The “market” link is further eroded by the absence of a clear policy on school and project fees, and frequent changes in that policy, resulting in an environment where roles, responsibilities and entitlements are often poorly defined and understood.

26. **... there is a role for the “market” link of accountability ...** There is some evidence on the parents’ willing to pay for education. For instance, only about 20% of the parents interviewed in 2002 (the year of the free education policy) said that the government should pay for the cost of

education; the rest (80%) thought the parents or parents and government together should bear the cost.

27. **... but the trade-off with equity would have to be directly faced ...** Evidence also shows that despite the subsidy, the income effects on primary enrolment are significant and positive. As also illustrated by the experience of 2002, enrolments did expand elastically to the substantially higher subsidies offered during that year. Thus, while there is evidence of willingness to pay for education on the part of parents, reductions in subsidy can be expected to have negative effects on enrolments. On the other hand, conditional transfer programs, like the Progresá in Mexico, are likely to defy successful implementation in PNG's context, where delivering subsidies to schools itself has proven to be extremely challenging.

28. **... There is a case for experimentation with greater flexibility in fee setting at the school level on a pilot basis (not for cost recovery but as an accountability mechanism) ...** While the subsidy element at least for basic education would need to be maintained in the interests of ensuring wider access to education by PNG's population, the policy on user fees could be liberalized, not so much as an instrument for cost-recovery but primarily as an accountability device. The liberalization could take the form of letting the schools (rather than the provincial or the national government) decide through the institutions of BOMs and PNCs how much fees to charge. There is evidence of the parents' willingness to pay for education which the schools and the local community are best positioned to harness. Some **regulation of maximum chargeable fees** will perhaps be necessary, the enforcement of which itself would be a challenge. However, the evidence on the tolerance of non-payment of fees suggests that there do exist some local limits on the exercise of monopoly power by schools, and the de facto trade-off between accountability and equity need not be as sharp as it seems. Overall, there is thus a case for experimentation with school-based liberalization of fee setting, while maintaining a high aggregate level of subsidies together with a mass information campaign on resources available at the school level (see below).

(b) Policymaker--provider relationship

29. **There is evidence that delivery of financial resources is worse under decentralized setting ...** The evidence from the experimental policy of 2002 indicated that a direct cash payment system – from the national Department of Education to the schools – works much better in preventing leakages and equally damaging delays. In 2002, the 3-4 times larger than the usual quantum of subsidy was delivered to schools with minimal leakage and reduced delays. The evidence also indicates that the PEAs and DEAs fail to play an effective role and the inspection system is inadequate.

30. **There is a case for direct cash-based subsidy system ...** Thus, with regards to subsidies there is a case for direct cash delivery to schools through bank deposits or checks. Other subsidiary reforms, such as subsidy payments on a 6-monthly rather than quarterly basis to reduce transaction costs, and a front-loading of the subsidy payments in view of the larger (and immediate) needs of schools at the beginning of the school year, may also be worth considering in this regard.

31. **... that can be allocated on a more progressive basis (without reducing the overall level of education subsidies for the primary sector that is likely to have a negative impact on enrolments)** Education subsidy policy in PNG has traditionally allowed for uniform per student subsidy rates across schools for given grades. The principle of uniformity has an element of built-in progressivity; the uniform amount translates into a higher proportion of per capita

incomes in poorer areas. However, there is some scope for introducing greater progressivity by allowing the policy to offer higher per student subsidy rates for schools located in poorer or more remote areas, that may also face higher unit costs for comparable levels of education services.

32. ... and a case for grants from government sources to be consolidated under subsidies ... For government grants, there seems to be a case for consolidating them under subsidies rather than operating them as a separate channel of financial transfers to schools. This could contribute to a simpler and more transparent system. At the provincial level in any case the evidence suggests that there is not much additional spending on education beyond the revenues budgeted for teacher salaries and education subsidies.

33. ... and better coordination of grants from donors ... The distribution of the donors' component, which accounts for about 70% of all non-government grants, primarily reflects placement decisions related to individual donor-supported projects. There is scope here for better coordination of donor projects with a view to achieving a more equitable distribution.

34. Significant cost-savings are possible through elimination of ghost teachers, but danger that the problem may reemerge ... With respect to ghost employees, there is an effort already underway to cleanse the payroll system. Important as this effort is, the challenge will be that once this cleansing is completed, the problem does not recur.

35. The scope for cost-savings through higher pupil-teacher ratios or a squeeze on teacher salary levels is limited (without affecting quality of services) ... This is in a context where teacher salaries have been declining in real terms in recent years, and average student-teacher ratios are on the high side (about 38 students per teacher).

36. There is no effective alternative to centralized payment of teacher salaries ... With regards to teacher absence and teacher performance more generally, payment of teacher salaries by the national government subverts accountability at the school level. There is little local authority (with the head teacher/BOM) to take disciplinary action against teachers (or against head teachers). However, given the problems associated with decentralized delivery of financial resources (illustrated plainly in the case of education subsidies), there may be no viable alternative to a centralized payment mechanism. There may be a need thus to look elsewhere for avenues to improve teacher performance.

37. ... but payment of teacher allowances needs to be improved to mitigate high turnover and shortages ... Based on the analysis in the study, a more promising approach may have to rely on improving teacher motivation and promoting stronger parental and community involvement. The former points to measures such as better provision of textbooks and teaching materials for students, reducing salary payment delays, fuller payment of allowances (and perhaps their consolidation under salaries as a means of ensuring fuller and more timely payment).

38. The inspection system needs to be better resourced, and there is a case for the provincial/district administrations to be more closely involved in this function.

(c) Client-policymaker relationship

39. **There is a need for consistent, more stable and clearly-communicated policy ...** An unstable policy environment – itself the product of an unstable political environment – can have a corrosive effect on short chain of accountability. For instance, during the “free’ education experiment, the lack of a clear policy on fees at times placed schools in an antagonistic position vis-à-vis the parents who wondered why they should pay any fees if their fees had already been paid by the government.

40. **... a role for information that can be linked to actions ...** Successful delivery of funds (if, for instance, accomplished through direct subsidy payments to schools) needs to be followed up by responsible utilization of funds at schools. The role of information can be potentially important here, as illustrated by the successful example of Uganda. Measures such as a mass information campaign by the central government on the transfer of funds to districts led to a large improvement in the receipt of funds at Ugandan schools. In the PNG context, the policy of direct subsidy payment to schools could be supplemented with an information campaign – through the print, electronic media (radio and TV) and mandated postings at school notice boards – on the amount of subsidy payment per student delivered to individual schools. This information could empower the local community not only in the setting of appropriate school fees (as discussed above) but also in monitoring the utilization of resources at schools.

41. **... but there are limits to the effectiveness of the long route of accountability under the current political system ...** There remain some serious constraints to the long chain of accountability (operating through the clients influencing policymakers who in turn influence providers) that are embedded in the political reality of unstable governments in PNG that are propped up by a complex system patronage of heterogeneous (mostly clan-based) interest groups. While there is an electoral reform process underway, including the introduction of a system of proportional representation, this reality is unlikely to change appreciably in the near future. **This reinforces the case for exploring some form of market link and strengthening the hand of the client.**

Poverty monitoring and evaluation

42. **The state of poverty data in PNG is weak from both a monitoring as well as an evaluation perspective...** Such a statement can be said to apply to both the income and non-income dimensions of poverty. Many different types of data are relevant to the monitoring and evaluation of poverty, including: data from surveys and censuses; administrative data; national accounts, macroeconomic and government finance data; and participatory/qualitative data.

43. **Survey-based data are probably the weakest element of the information base for national poverty monitoring and evaluation in PNG...** At the time of writing of this report, the 1996 DHS and NHS are still the most recent household surveys available. Into the eighth year since the last survey, over a period when the economy has undergone significant contraction, the need for a new household survey to assess and comprehend changes in household welfare can not be over-emphasized. Even for supporting production of **sub-national statistics** – whether done directly through a survey with a sufficiently large sample size, or indirectly through a Poverty Mapping/small-area estimation exercise – the revival of household survey-based data collection is very important.

44. **... case for an integrated survey.** From an evaluative and analytical perspective, collecting data on a broad range of variables *for the same set of households* (or alternatively, being able to link different surveys with each other) is of great importance. However, despite extended discussions on conducting an integrated household survey for PNG, progress towards implementation has remained elusive, and there is a pressing need now to resuscitate this initiative.

45. **There is no labor force survey in the country...** and hence there is no system of reliable or timely information on employment or wages. Looking ahead, such a survey ought to be undertaken, either as an independent activity or accommodated as a separate module within other household surveys like the DHS or the NHS.

46. **Possibilities for periodic facility-based surveys are also worth exploring ...** Facility-based surveys, such as the PESD, are a useful supplement to household surveys in examining issues relating to the delivery of basic services to the poor and to the population at large. Sometimes, such surveys can also be usefully integrated with household surveys, as in the case of the recent Lao Expenditure and Consumption Survey, and such possibilities are also worth exploring in the PNG context.

47. If there is a trade-off between frequency and comprehensiveness of survey-based data collection (on account of affordability or managerial capacity), **the use of relatively quick monitoring tools such as the Core Welfare Indicators Questionnaire (CWIQ) ought to be considered** as a potential alternative for frequent monitoring of a limited number of indicators. CWIQs are not a substitute for regular household surveys, but they can be undertaken more frequently (even annually) while the regular surveys can be undertaken on a less frequent basis (for instance, every 5 years).

48. **Data from other non-survey based sources** – i.e. census, administrative data from line agencies, national accounts/public finance data, participatory assessments – are important in their own right and are a useful complement to survey-based information, but they are never an adequate substitute for survey data. Some specific issues in relation to non-survey data in PNG are notable.

- With regards to the 2000 National Census, the remaining analysis and dissemination work needs to be expedited and completed. The revision of the boundaries of urban areas is also long due for revision.
- There is an important need to link administrative data with census and survey-based data. Combined with mapping techniques, such data can then be an important tool for intra- and inter-sectoral resource allocation and the targeting of poverty reduction interventions.
- The weighting diagram for the Consumer Price Index (CPI) – currently based on a 1975-76 household expenditure survey of wage earner households in urban areas – is in need of urgent updating. There is also a case for developing a rural CPI.
- Efforts to improve provincial budget information such as those by the National Economic and Fiscal Commission need to be strengthened and institutionalized.
- There is a significant role for participatory/qualitative assessments of poverty undertaken on a periodic basis, and these should ideally be integrated into the overall monitoring and evaluation system.

49. The ability of information systems to deliver benefits to stakeholders is ultimately critical to their sustainability. Thus, promotion of the both **data dissemination and data use** is important, which in turn will need efforts on both the supply and the demand side including measures to strengthen capacity of statistical agencies, training on policy uses of data, fostering active links between data gatherers and current or potential data users, and aligning the poverty monitoring system directly with the budget cycle.