

Executive Summary

Emergence of a New State: Adverse Initial Conditions

Carved out of southern Bihar as a new state of India in November 2000, Jharkhand was plagued by adverse initial conditions – low average income, very high incidence of poverty, and little social development. Its nominal per capita income ((\$314 in 2003/04) is low (only 55 percent of the all-India average), though not the lowest among the major Indian states. It is actually higher than the per capita income of Bihar and Uttar Pradesh (UP) and similar to that of Orissa. The average per capita income is also associated with a high degree of income inequality and a rural-urban gap within the state as is evident from the high incidence of poverty in rural areas. The initial level of rural poverty, assessed at 49 percent by the National Sample Survey (NSS) 55th round in 1999/2000, was the highest among all Indian states, the second highest being Orissa (48 percent), followed by Bihar (44 percent), Assam (40 percent), and Madhya Pradesh (MP) (37 percent). This suggests a potential distributional issue, as relatively better per capita income ranking adversely translates into a lower ranking on the rural poverty scale. The divide is sharper when the rural and urban areas are compared. The incidence of urban poverty is, however, only 23 percent, which is similar to or better than Andhra Pradesh (AP) and Maharashtra (27 percent), Karnataka (25 percent), and Tamil Nadu (23 percent), and much lower than in Orissa (44 percent) and Bihar (34 percent).¹

¹ These poverty estimates are "unadjusted" i.e. without making any Deaton-Dreze (2002) type of adjustment for any possible overestimation of per capita monthly consumption from the simultaneous recording of food consumption through 7-day/ 30-day memory recall in Schedule 1 of the NSS. Hence, only the official poverty numbers are used here for state-level comparisons for both rural and urban poverty.

Initial health and education indicators in Jharkhand were also markedly unfavorable in comparison to both the all-India average and the major Indian states. The proportion of children with full vaccination was assessed at an abysmal 9 percent compared with the all-India average of 42 percent. The proportion of institutional deliveries was a low 14 percent, the presence of skilled birth attendants 17 percent, and the proportion of women who received at least one ante-natal care (ANC) contact just 42 percent. These are close to coverage levels in undivided Bihar, but much lower than the all-India average. As per the census (2001) figures, the literacy rate of the state at 54 percent is the second lowest in the country (after Bihar) against the national average of 65 percent. With the male literacy rate at 68 percent and the female literacy rate at 39 percent, the state has the second highest rate of gender disparity in the country after Rajasthan.

Signs of Hope: A Balance Sheet of Change in Recent Years

Despite the adverse initial conditions, there are some early signs of turn around in Jharkhand in several respects. Poverty declined by an impressive average of two percentage points a year between 1994 and 2002. This may be compared to about 2.5 percentage points a year observed at the all-India level during the same period as per official "unadjusted" data. Progress was highly uneven, however, between the rural and urban areas with the pace of rural poverty reduction being faster. The sustainability of poverty reduction especially in rural areas is a cause for concern given the rainfed agricultural conditions.

The state has experienced a modest, volatile, but consistently positive per capita growth rate of 2.4 percent per year in Gross State Domestic Product (GSDP) during 1993–2003 and about 2 percent per year in consumption expenditure over 1997–2002, as estimated from the NSS. The total GSDP growth rate was about 4.8 percent per year during 1993–2003 compared with 6.0 percent for India as a whole. However, almost all sectors in Jharkhand showed huge volatility in growth rates year on year. While the agricultural sector grew at a rate of 4 percent (higher than 2.2 percent for all India), the industrial and services sector grew at rates lower than the all-India rates. The mining sector, which contributes nearly 15 percent of the GSDP (six times more than the all-India level), grew at only 3 percent, compared to a 4.6 percent growth of this sector at the all-India level.

The poverty-reducing effects of growth have been further helped by improvement in distribution in rural areas. In contrast, urban growth was highly inequitable. The Gini index of consumption inequality has dropped for both thick and thin round intervals for rural areas.² The corresponding figure for urban areas increased from 34 to 36 percent during the period 1994–2000, and rose at an even higher pace during 1997–2002.

There has been impressive improvement in access to primary education, especially in the 6–14 year age-group, for both gender categories and the Scheduled Caste/Scheduled Tribe (SC/ST) population. The age-specific enrolment rates for the 6–11 year age-group improved from 56 percent in 1993/94 to 58 percent in 1999/2000 (as per the NSS data) and further to 95 percent in 2005 (as per the Sarva Shikshya Abhiyan (SSA) household census). The impressive increase in enrolment has been accompanied by greater gender and social equity as well. The Gender Parity Index (GPI) for primary grades in the state is 0.98 and for the upper primary grades 0.97. Similarly, as far as the social equity in enrolment is concerned, SC/ST

enrolment shares were close to their shares in the respective age-group population.

Equally impressive progress has been made in some key health indicators, especially in the area of child vaccination and prevention of major diseases. The newly instituted “catch up rounds” (since 2002/03) has led to a dramatic improvement in the coverage of child immunization, and vitamin A and iron supplementation. The United Nations Children’s Fund (UNICEF) has recently estimated that immunization coverage is now almost 50 percent compared to 9 percent in 1998/99. This is the most rapid rise in coverage recorded in India for a five-year period. The state has made significant progress in reducing the prevalence of leprosy and, to a lesser extent, in the spread of communicable diseases such as tuberculosis (TB). The prevalence rate for leprosy dropped to 2.69 per 10,000 in 2005 from a high of 10.9 per 10,000 (three times the national average) in 2001. In the case of TB the state has achieved an impressive success rate in treatment of over 90 percent (compared to the national average of 85 percent).³

The decline in poverty and the improvement in social indicators can perhaps be attributed to increased allocations coupled with better implementation as well as the involvement of Non-Government Organizations (NGOs). Most importantly, it shows that the Government of Jharkhand (GoJ) is aware of the challenges it is facing, and is committed to overcoming them to improve state outcomes.

Key Strategic Challenges for Inclusive and Sustainable Growth

Despite this progress, Jharkhand remains a state with one of the highest poverty rates in India. The goal is therefore

² Thick rounds are NSS five-yearly surveys and Thin rounds relate to NSS annual surveys on household consumption expenditures.

³ Jharkhand, however, still lags behind most other Indian states in respect of two key health MDG indicators according to the recently completed 2005/06 NFHS-III survey. Firstly, the prevalence of child malnutrition (as measured by the proportion of underweight children) remains one of the highest in India, being assessed at 59% compared to 60% in Madhya Pradesh, 58% for Bihar, 52% in Chhattisgarh, 44% in Orissa, 40% in Assam, and much higher than the all-India average of 46%. Secondly, the infant mortality rate in the state stands at 69 deaths per thousand live births compared with 70 in Madhya Pradesh, 62 for Bihar and 57 for the all-India average.

not only to accelerate growth but also to ensure that it is socially inclusive and environmentally sustainable. This study identifies the central importance of three necessary cross-cutting conditions for achieving these objectives: (i) **addressing institutional gaps** (building new institutions as well as improving the performance of existing institutions); (ii) **improving access to infrastructure** (such as irrigation, roads, power, telecommunication, storage facilities, schools and clinics); and (iii) **expanding rural opportunities** (which should not be limited to the "access" issue in the sense of creating economic opportunities, but also to enhance household and community capabilities to take advantage of such opportunities). These are "bottom-line preconditions" in the sense that for any development strategy to be successful in the state, these sets of issues need to be tackled up front.

Addressing the Institutional Gap and Improving Performance

While the implementation of programs has improved after the separation of Jharkhand from Bihar, the state faces significant challenges in overcoming the growing weaknesses of implementation capacity. This is especially important in the context of the huge increase in planned capital expenditure (mostly on account of infrastructure building) from 2.8 percent of GSDP in 2003/04 to 7.7 percent of GSDP by 2006/07 (budget estimates).

Weak institutional performance can be observed from the deteriorating fiscal situation. The fiscal deficits of the state have been rising at an alarming rate. The state is unlikely to meet most of the performance criteria posited by the Twelfth Finance Commission (TFC) for debt relief and may lose out on substantial fiscal receipt on that count. This does not augur well for the state as it faces major development challenges that require increased public sector allocation especially for infrastructure and human resource development.

Except for the one year, 2003/04 (when the central elections took place and the model code of conduct was in place), fiscal deficits have risen rapidly in

recent years and reached a high of 10.1 percent of GSDP in 2005/06 (RE). The biggest increases have come on the expenditure side -- in particular, transfers and capital expenditure -- which may well be in line with a desired development strategy but which have not been matched by increases on the revenue side. This is typical of a new state, as with other new states, where finances are better in the first few years and then deteriorate in the following years as the division of assets and liabilities takes place and new hirings begin to fill up gaps in capacity.

In order to put its fiscal house in order, the state needs to introduce reforms for improving resource mobilization, increasing cost effectiveness of expenditure and rationalizing the budgetary processes. While large increases in expenditure on infrastructure and social development of the underprivileged groups in the state are warranted, it is important to ensure that these are within the absorptive capacity of the state. A good monitoring mechanism needs to be put in place to ensure there are no leakages in the system. Consolidation of schemes will help cut down administrative costs. Some common expenditure control measures to be considered include restrictions on the creation of new posts, rationalizing of existing posts and a ceiling on contingent liabilities. Improving public procurement should also play an important role in enhancing the effectiveness of public spending while at the same time reducing unproductive expenditure.

At present, the budget does not reflect a realistic picture of the financial position of the state. While the overall level of debt is known, other disclosures such as large outstanding pension liabilities and contingent liabilities (committed contracts, guarantees, bad debts etc.) are not known. The government needs to prepare a medium-term expenditure plan and place its annual budget preparation within the context of this plan. This plan should be prepared in consultation with the line departments and be consistent with resource mobilization efforts to ensure fiscal discipline in the medium to long term. Other immediate steps include drawing up of a Medium-

Term Fiscal Reforms Program (MTFRP) incorporating the incentives outlined in the TFC award.

Apart from managing the finances, the effectiveness of implementation is affected by four sets of factors: (i) high micro-risks such as insecurity relating to extremist violence; (ii) problem of corruption; (iii) inadequate administrative capacity; and (iv) low beneficiary participation and satisfaction.

In terms of the incidence of left-wing extremist violence, Jharkhand is second to Andhra Pradesh. There is a widespread perception in civil society that while corruption in Jharkhand is considerably lower than in Bihar, it is a growing menace. The 2005 TI-CMS perception survey ranks the state as being 14th among 20 states in terms of "efficiency and transparency of governance". Although the relative ranking is better than Bihar, MP, Karnataka, Rajasthan, and Assam, it is worse than Chhattisgarh (one of the other newly created states) and Orissa.

Severe administrative capacity constraints that have been captured by some proxy indicators include: (i) extent of shortfall in program implementation; (ii) frequent premature transfers of top-level managers; and (iii) absence of key departments while some others being understaffed. The extent of shortfall in program realization can be observed across sectors—in education, health, anti-poverty schemes, infrastructure-building — the shortfall being higher than the all-India average. For example, last year, the health department of the state was able to spend only 68 percent of funds allotted. The implementation of food security programs is unsatisfactory, especially the off take of rice from the Public Distribution System (PDS). According to the Concurrent Evaluation of the Sampoorna Grameen Rozgar Yojna (SGRY) conducted on behalf of the Ministry of Rural Development, Jharkhand had lifted only 18 percent of the authorized allocation in 2002/03, and only two-thirds of the meager share lifted was distributed to beneficiaries.

While many important departments have not been established yet, some others have serious manpower

shortages with numerous technical positions vacant, especially in the districts. To give one example, the state does not have a department of economics and statistics (DES), vital to the monitoring of development outcomes. Both the finance and the planning departments currently have a severe shortage of technical manpower. The same applies to service delivery departments such as agricultural extension, education and health. In many districts, the share of single-teacher schools is as high as 40–50 percent. In most districts of Jharkhand, the share of female teachers in the total teacher workforce is less than 30 percent, adversely affecting the schooling outcome of girls.

In a state like Jharkhand with a huge mineral endowment and large forest cover, the management and governance of minerals and the natural environment assumes heightened importance. The localities often get inadequate attention in the rush for mineral development and end up suffering in economic, social and environmental terms. For example, the existing legal framework for regulating land for mineral leases is weak and leaves ample scope for unfair losses for those whose land is acquired. The legal opinion in GoJ seems to be that the Land Acquisition Act (LAA) of 1894, which allows acquisition of land for "public purposes", is the official route for acquiring land for mining leases. However, the LAA does not provide any real space to the affected parties for protest, negotiations or even discussion.

An important "missing institution" in Jharkhand, crucial for inclusive development, is the absence of a popularly elected, administratively and fiscally empowered local government/Panchayati Raj Institutions (PRIs). This is true both for scheduled and non-scheduled areas leading to low beneficiary participation, poor accountability of service providers, and low user satisfaction. The PRI elections have been put on hold by a court order because of legal challenges over the state's reservations policy, thus aggravating not only the pre-existing feeling of isolation of previously excluded groups but also affecting the institutional performance of development programs on the ground. As per the central Panchayat Extension to Scheduled Areas (PESA) law and the 2001 Jharkhand

Panchayati Raj Act, in scheduled areas, the Gram Sabha is to be vested with strong powers, such as the right to approve programs and projects, select beneficiaries, and certify the correct use of funds by the Gram Panchayat (GP) in the form of a utilization certificate. This is potentially a powerful tool for accelerating development in the state, which has remained trapped in the legal imbroglio.

Weak institutions translate into poor service delivery and client dissatisfaction. This may be seen from a range of indicators culled from a recent beneficiary survey. For economic services such as rural roads only 57 percent of the respondents rated the quality of roads constructed as "good". In the case of water supply, 44 percent respondents reported frequent breakdown of water supply. Only a few respondents (4 percent) have reported the availability of constructed drainage systems and even of those who have such access, 44 percent remained dissatisfied because of water clogging and water overflows. The primary health sector appears to be very precarious with high a level of doctors' absenteeism: 47 percent of rural respondents reported doctors' absence in the Primary Health Center (PHC). The other client satisfaction indicators also tell the same story in rural health. The reasons for poor client satisfaction are many: distance, absenteeism, attitude, inadequate provisioning for maintenance, and low local-level participation.

The factors adversely affecting client satisfaction can be overcome through appropriate institutional reform. Gradual improvement in the governance of the primary education sector is a case in point. Teacher absenteeism, which was as high as 39 percent three years ago, according to the Pratham study has improved. On average, the share of primary school teachers attending schools was 76 percent while that of upper primary teachers was 75 percent. However, on a single day, only 50 percent of primary schools and a shocking 27.8 percent of upper primary schools had all the teachers present. Although subjective measures such as a user satisfaction survey show primary education in a favorable light, the objective measures indicate a much more serious problem of educational achievement.

Weak institutions for implementing anti-poverty programs tend to bypass a large segment of the needy poor, leading to poor targeting as well as high incidence of program leakage. All sources indicate that, despite significant investment, only a small percentage of Below Poverty Line (BPL) families benefit from these programs. Using administrative data, even in the best case scenario, program coverage is low, at around 3 percent for self-employment and housing programs, 11 percent for wage employment, and 27 percent for old age pensions for the elderly living below the poverty line. These estimates are very optimistic, as they assume that only BPL families benefited from the programs and that there was only one beneficiary per family per program. Survey-based data allows for a clearer picture. For example, according to a recent Program Evaluation Organization (PEO) evaluation of the Targeted Public Distribution System (TPDS), only 57 percent of BPL families were able to avail of TPDS benefits and a similar evaluation commissioned by the Department of Food and Public Distribution found that those who received benefits still depend on market sources for more than half their rice requirements. The recent evidence for 2005, as generated by the present study, also confirms the picture of low target group coverage. With the exception of PDS, no program covers more than 10 percent of all rural households.

Improving Access to Infrastructure Services

Bridging the huge gap in the provision of infrastructure services, a critical requirement for accelerated and inclusive growth, requires large investments along with concurrent institutional and policy reforms. Investments in infrastructure not only accelerate growth, but also have strong linkage effects with other complementary inputs such as human capital, access to finance, and adoption of new technology. With improved connectivity, for instance, economic and social development literally moves into the areas connected. Improved institutional performance on the other hand reduces the "transaction costs", which, in turn, increases

the productivity as well as the rate of investment via favorable investment climate effects.

Lack of access to infrastructure can be measured in terms of under-provisioning, relative to the rest of India as well, as in terms of high unmet demand in key areas such as transportation, telecommunication, power, water supply and irrigation. The extent of deprivation is higher in Jharkhand compared to the rest of India and higher in rural areas than in urban areas. In rural areas, the seriousness of infrastructure constraints, relating to irrigation, power and roads, is indicated, among others, by the NSS data. The rate of irrigation is inadequate and distributed extremely unequally—more unequally than the distribution of physical and human assets. Household access to electricity at 11 percent is extremely low in rural Jharkhand, compared to 48 percent for rural India (the only state that has a lower access rate than Jharkhand in this sample is Bihar). Merely 36 percent of villages in the state have immediate access to all-weather roads compared to the all-India average of 57 percent.⁴ Bihar is the only neighboring state, which has a lower rate of all-weather and metal road access.

Improvement of infrastructure is equally important for attracting investment in urban areas as revealed by Investment Climate Surveys. The availability and quality of infrastructure is a critical constraint faced by firms operating in Jharkhand and cited with equal vigor by potential investors as a major reason for not choosing the state as an investment destination. Jharkhand lags behind the average figure for India on most infrastructure availability indicators, such as road length per 100 sq km, power availability per capita, net irrigated area and tele-density. The picture is starker in relative terms: out of 28 states, Jharkhand ranks 22nd on the aggregate infrastructure index which covers the power, communications, and transportation sectors. Competing states such as Chhattisgarh, Orissa, and West Bengal rank at 17, 14, and 11 respectively. In terms of infrastructure, the sector-wise break-up shows that the

⁴ The corresponding figures for village-level access to metal roads are 25 percent and 45 percent.

state is ranked 21st in communications, 18th in power, and 14th in transport.

It is possible to improve the provisioning of infrastructural services through sector-specific investments and policy interventions. The formulation of an infrastructure development policy, creation of an infrastructural development board/corporation and an enabling act along the lines of the Andhra Pradesh Infrastructure Development Enabling Act, would facilitate private investment in infrastructure. Some short- and medium- term reform measures in the transport, water supply and sanitation, irrigation and power sectors have been listed in the Box 1.

Expanding Rural Opportunities

Expanding rural opportunities in no way means retracting from the urban sector. However, rural opportunities need to be especially addressed in Jharkhand in the light of uneven distribution of access to assets in the state. Estimates based on the 55th round of NSS indicate that the concentration of landownership in rural Jharkhand, though lower than the all-India average, is considerably skewed. This is despite the legal restrictions on the tribal land transfers, as originally envisaged in the Chhotanagpur and Santhal Pargana Tenancy Acts. The estimated Gini inequality of rural land ownership for the state is 0.64 compared to the all-India average of 0.71. The inequality of landownership in the state is possibly on rise in the recent years through illegal (distress) land transfers. This is borne by the Jharkhand Baseline Survey as well, which finds evidence for increasing inequality in rural landownership over the past decade.⁵ The main driver of this process appears to be tribal land alienation. Other non-land assets (including human assets) are also distributed unequally across rural land size-class and poverty categories, but the extent of inequality appears less sharp.

⁵ According to the Baseline Survey, the Gini index of inequality in the distribution of land ownership increased from 0.65 to 0.70 over 1995–2005. The inter-temporal comparison is based on "memory recall" on household land-ownership and should be taken as indicative only.

For the disadvantaged poor, access to favorable market arrangements can improve the return to initial assets.

For example, the land-poor can gain access to land through the tenancy market and the returns to land can be enhanced through improved irrigation. The returns to labor can be higher if the poor have access to jobs with better remuneration and access to capital through credit markets can help support rural farm, off-farm or non-farm diversification. This, however, is not the case in rural Jharkhand.

The major explanation for the rural factor and output markets functioning poorly is the lack of access to rural infrastructure such as irrigation, roads, power, and access to credit.

Among the key infrastructural elements, appropriate irrigation facility is one of the most important. Irrigation-led agricultural growth has been the prime trigger of successful agricultural transformations over the past 30 years in most regions of South Asia. The rate of irrigation remains one of the lowest among all Indian states. According to the Ministry of Agriculture data, the rate is assessed at 11 percent. The NSS data, in contrast, gives a higher coverage, but is still restricted to 23 percent compared to 41 percent at the all-India level. Besides, not only is the rate of irrigation low, it is also highly unequally distributed. Nearly all the irrigated land classified in the NSS data is concentrated in the first two deciles.

Although the limits to extending irrigation are relatively low in Jharkhand (only approximately 40 percent) compared to other states such as Bihar and West Bengal because of land-terrain constraints, irrigation provides a viable entry point for accelerated rural development.

Different types of irrigation possibilities, that is major, medium, micro, and drip irrigation systems can be developed. Indeed, different irrigation technologies involve different ownership mix possibilities: while major and medium irrigation systems are likely to be public sector led, micro-irrigation through water harvesting is suitable for the tribal upland and likely to be community led. In Jharkhand, irrigation coverage did not expand in the past largely because of under-investment in major- and medium-irrigation systems. Returns to irrigation appear to be considerable even in the present context. Based

on NSS data, it is estimated that the impact of adding an extra unit of land under irrigation increases the average per capita monthly expenditure by about 17 percent while controlling for regional effects.

The return to rural assets can be enhanced through improved access to physical infrastructure such as electricity and road.

Evidence suggests that access to both electricity and road at the community level can make a considerable difference to average rural incomes. This can be measured by a range of indicators. By simply being located in a village with access to electricity can increase average income (consumption) of a typical rural household by about 22 percent. Good road access conditions can enhance income by approximately 18 percent. The largest impact is noted when a village is directly connected to a wholesale market by good road access; the corresponding difference increases by over 40 percent compared to those communities without such access. The expansion of this basic infrastructure tends to result in the clustering of other infrastructural facilities such as bus-stops, pharmacies, public telephones, post offices and small community-level shops around roads and electricity.

Attainment of secondary and post-secondary education is important for raising rural incomes.

This is because human capital accumulation can raise rural incomes only after it crosses a threshold level. Access to primary education does not have any statistically significant impact on household income. Education in rural areas has the effect of increasing rural household income only after the post-secondary (10th grade completed and above) education level, suggesting that the incremental effect is rather modest in households headed by someone with secondary education while the gains to completing college education are much higher. The problem is that only a few rural households in Jharkhand can take advantage of this, as access to human capital is extremely limited both at secondary (18 percent of household heads) and post-secondary (5 percent of household heads) levels of education.

Financial access through alternative channels, including those mediated via NGOs and the vibrancy of the

local economy, appear to have the favorable impact of increasing average rural income. Micro-finance and other programs supported by NGOs can have an important effect on income: an average rural household residing in communities with strong NGO presence has higher per capita income than its counterpart without such a facility (the difference is equivalent to 11 percent of average rural per capita consumption expenditure). The most important factor is, perhaps, the vibrancy of the local economy (captured here via the presence of community shops). This factor alone will augment average rural income by an amount equivalent to 17 percent of per capita consumption expenditure.

Once the above-mentioned infrastructural elements are put in place, the entire rural livelihood dynamics can change in a major way. In the changed context, the role of agricultural extension becomes important both for informed crop choice, depending on the area's agro-ecological potential, and for the dissemination of improved cultivation practices. With a growing marketable surplus, agricultural marketing will expand, which in turn would lead to increased demand for new investments in roads and better maintenance of existing roads to reduce transport costs. The development of transport infrastructure has a direct effect on employment for transport operators. Increasing the purchasing power of the farm sector also raises the demand for goods and services produced by non-farm sectors. This, in turn, creates scope for increasing the productivity enhancing as well as employment generating potential of rural non-farm sectors. Once the demand side constraints are released, access to power (and other inputs) can help release the supply-side constraints in the rural non-farm sectors.

These developments will lead to favorable pro-poor changes in the labor market as well. The study diagnosed five important characteristics in Jharkhand's labor markets: (i) the subsidiary status of farming; (ii) predominance of non-agricultural casual labor as the main occupation; (iii) very limited role for rural non-farm self-employment; (iv) relatively higher income for non-agricultural (especially salaried) workers;

and (v) increasing rate of distress out-migration. As access to infrastructure, finance and education increases, more remunerative job opportunities will be created in farm and non-farm self-employment than at present. Farming, in particular, will become more profitable – from being just a subsidiary occupation it will turn into a main source of income for many rural households. This will create the advantageous cycle of greater demand for efficient input use (including farm credit) and agricultural/rural diversification. Greater access to education will also help the exit of labor to more remunerative and regular wage (salaried) labor markets.

Alternative Development Paths: Defining a Middle Way

Two opposite views of the development debate are represented by the different degrees of importance given to mining and agriculture. One view contends that the development of the mining sector can usher in a new decade of development in Jharkhand. It can act as the natural launching pad for growth acceleration and financing of broad-based social development. This view states that since the state has the largest share of mineral Gross Domestic Product (GDP) amongst all Indian states, it should capitalize on its strength and not on its weakness (in this case, crop agriculture with a near total dependence on rainfall). This line of reasoning draws attention to capitalizing on the potentially substantial fiscal gains (mobilizing rents in the form of mineral revenue) and spending the additional gains on rural and social development, thus providing a win-win situation in terms of both growth and equity.

In contrast, the second view is that the potential risks associated with the mining sector are high and that agriculture has shown great potential through impressive growth⁶ in recent years contributing significantly to poverty reduction and human resource development. This line of thinking suggests there is emerging evidence of high risks associated with the unregulated development of the

⁶ The success story in agriculture is based on data up to 2002; hence it needs to be moderated in the light of the drought witnessed in the last three years.

mining sector in conditions of relatively poor governance, apart from the risks of flouting the provisions of social and environmental safeguards. In the absence of a separate capital development fund supported by mineral revenues and exclusively earmarked for rural and social development, the prospects for more than off-setting compensation are uncertain as untargeted funds get used for other less important purposes, besides encouraging corruption. All these can eventually lead to greater destruction of livelihoods rather than their creation. Hence, the natural launching pad is not all that natural after all, and agriculture provides a much safer option given the adverse conditions of governance.

To the extent that technological progress is dependent on the expansion of irrigated agriculture, especially during the winter season, the prospects of agricultural growth in the state will be modest. Even if judicious investment in irrigation schemes, itself a major undertaking given the past experience in constructing major surface water based irrigation projects, expands the current acreage under irrigation to its potential, it will still be restricted to only 40 percent of the land that can be irrigated in the state.⁷ This can be compared to 70-80 percent irrigable land in the neighboring regions of the erstwhile Bengal Presidency that is, Bihar, West Bengal, and what currently constitutes the territory of Bangladesh where the groundwater irrigation potential is huge.

Crop sector growth even with the fullest expansion of irrigated acreage every year is likely to remain restricted to the trend growth rate of 3 percent per year and 4 percent per year for the overall agricultural sector as a whole (if one takes the standard achieved in West Bengal and Bangladesh in the best possible agricultural growth scenario). If the state realistically aims at a 6 percent growth rate over the medium term, from the current trend of 4 percent per year, it will have to focus on sectors outside of agriculture as well. With the proportion of agricultural value addition at only 22 percent, agriculture's direct

contribution to the overall growth rate under the best possible scenario cannot exceed 15 percent; the remaining 85 percent must be generated in other sectors.

On the other hand, the state is yet to develop appropriate institutional and regulatory conditions, as well as safeguard mechanisms for embarking upon a fast-paced mineral-based growth strategy. In fact, without having such institutional safeguards firmly in place, an unregulated mineral-based growth strategy can bring in more risks than rewards. This can be judged by several examples. One group of examples relates to the manner in which institutional safeguards of the local people directly affected by mining activities are being addressed, that is the *equity aspect* of mining-based growth. The other relates to the institutional hurdles that genuine private investors face in undertaking new investments in the sector, which is the *efficiency aspect* of mining-based growth.

Given the strengths and weaknesses of the two options, the present study suggests a middle path, aiming at an inter-temporal balance between the two strategies. While mining and broad-based industrial progress will lead growth over the medium to long-term and create resource mobilization, it is the agricultural and rural sector that needs to be continuously addressed in the short to medium term. This requires several factors to move in tandem. *First*, there is a need to focus on institutional building, especially the aspects dealing with risk, risk-perception, and risk-mitigating measures which are central to promoting growth and the poverty reduction agenda. *Second*, there is need to increase labor productivity in the agricultural and rural sector with high employment and increase in employment in the known rural sectors, especially through the development of small and medium enterprises (SMEs). *Third*, each of the economic sectors should be able to grow to its long-term potential including mining and mineral-based industries. However, efforts to "force in" development of a particular sector without addressing sector governance constraints can backfire in the context of a rather sharp rural/ urban "dualism", and a socially and spatially polarized economy of Jharkhand.

⁷ World Bank and Government of Bihar, Bihar Plateau Irrigation Project, 1994.

The answer indeed seems to lie somewhere in between, with the crux of the overall strategy aimed at reducing risks associated with mineral-dependent growth, especially in an economy with high levels of poverty and inequality. Building institutions, increasing labor productivity in agriculture and employment of people in the non-farm sectors to the extent possible through the development of SMEs is a possible way forward in the short to medium term. A balanced strategy would require broadening the manufacturing base beyond mineral-based industries and establishing forward and backward linkages leading to employment generation. In order to promote mining development in a sustained manner, a strong governance framework and institutional capacity is a must to mitigate any social or environmental impact.

Social Inclusiveness for Effective Citizenship

Social inclusion and effective citizenship for all are desirable outcomes everywhere, especially in Jharkhand with its sharp social and regional divide. Comparative poverty profiles across states shows that not only do SC/ST groups have a higher poverty rate than other social groups, the tribal groups in Jharkhand (along with Orissa) have the highest poverty intensity in India—higher than the ST groups in other Indian states.⁸ Over the post-emergence years although signs of progress have touched virtually all social groups, the extent of improvement has been unequal, with the tribal groups benefiting the least. This is also reflected in the spatial differences with high concentration of poverty and greater access-deprivation in the remote districts. Hence, the inclusiveness of the tribal groups and remote areas is a priority issue from the vantage of citizen rights.

Tribal inclusion can be achieved through broad-based social sector investments as well as civic and

community empowerment. Jharkhand can achieve higher social progress such as basic education and health Millennium Development Goals (MDGs) even at relatively low levels of income, and can improve upon the coverage, targeting and efficiency of the social protection schemes for the most needy and vulnerable. In the medium term, institutional arrangements need further development of public-private-NGO partnership within a permanent collaborative framework that ensures efficient service delivery.

Promoting social inclusiveness will be important for achieving sustainable development as well. The weakening of socio-political institutions required for protection of both weaker groups and natural resources represents a threat both to tribal society and to the environment. The weakening of traditional institutions also threatens the environment and National Resource Management (NRM) based livelihoods.

An important step would be to bridge the current gap between "legal" and "customary" rights by explicitly recognizing tribal institutions in Jharkhand as an expression of direct democracy. In particular, customary land tenure should be recognized. People should be consulted on their vision of development; their land should not be acquired without their prior and informed consent (instead of mere consultation); they should have shares in any project that comes up on their land with their land ownership remaining intact; and they must be asked to move only if rehabilitation has been satisfactorily completed.

Finally, political commitment is needed to "make development happen" in the shortest possible time. There is need to ensure that the political gains achieved through years of struggle to create a separate "tribal state" start yielding significant economic benefits. It is time that the voices of the left-out majority of the state are finally heard and their problems acted upon, and that an accelerated and inclusive growth strategy finally ushers in a new development decade for Jharkhand.

⁸ The head-count incidence of poverty for the ST group is 71 percent in Orissa and 56 percent in Jharkhand compared with 47 percent in West Bengal, 40 percent in Bihar, and only 27 percent in AP, as estimated by the present study from the NSS 55th round.

Short- and Medium-Term Policy Options for Reform

A. Improving the Investment Climate to Promote Broad-Based Growth

Short Term

- Removing regulatory constraints, including: (i) setting up a single-window clearance facility for approval of new projects, empowered by legislation; and (ii) transparency of approvals by setting standards and time frames for issuing clearances, with provisions for deemed approval if such clearances are not obtained within declared time frames.
- Improving access to land: (i) creating an industrial land acquisition and facilitation agency for development and management of industrial parks in the state; (ii) creating a land bank for industrial purposes, at least for urban areas based on rational land-use planning principles consistent with the compensation and safeguard policies; and (iii) improving credit information on SMEs through assistance to commercial banks and financial institutions to verify and collate historical data on SMEs.
- Enhancing access to finance through improvement in the credit evaluation and risk management skills of banks and other financing institutions. This would improve lending practices by building capacity to reduce transactions costs and also reduce and manage risks related to SME lending.

Medium Term

- Computerizing and updating of land and property records that impede the use of land as collateral, and promoting the use of collateral substitutes.
- Strengthening business development services and market linkage programs for SMEs to improve competitiveness, profitability and creditworthiness.
- Amending the Contract Labor Act at the state level to allow contract labor to be employed in non-core activities subject to certain conditions.
- Adopting the amendment to the Industrial Disputes Act in line with the proposed central bill amendment to enable easy exit options for industries.

B. Improving Access to Quality Infrastructure

Short Term

- Formulating an infrastructure development policy, creating an infrastructural development board and corporation, and an enabling act to facilitate private investment.

Transport

- ▶ Assigning the core rural road network to the State Road Development Agency, making it functional by providing necessary staff and resources, and applying the procedures used in the Pradhan Mantri Gram Sadak Yojana (PMGSY) across the sub-sector.
- ▶ Assigning the core highway network to a semi-autonomous State Highway Authority, after a functional reclassification of roads, to be managed along commercial lines as provided for under the Jharkhand Highways Bill.

Water Supply and Sanitation

- ▶ Creating awareness about the links between sanitation and health through campaigns.

Irrigation

- ▶ Upgrading the technical skills of personnel in the water resources department to enable them to design, operate and maintain modern irrigation infrastructure.
- ▶ Unbundling water resource management from irrigation service provision, setting up of new institutional arrangements with a state-level apex body like the State Water Resources Agency, appointing an independent regulator to encourage public-private partnerships in developing mini hydroelectric stations and irrigation systems with specialized agricultural crop zones.

Power Sector

- ▶ Improving financial reporting and internal controls for each company, including internal auditing, procurement, fuel supply and metering, billing and collection for large power consumers.

Short- and Medium-Term Policy... (Contd.)

- ▶ Increasing representation of independent non-executive directors on the boards of power companies through a transparent, competitive recruitment process.
- ▶ Operationalizing the corporate restructuring, including: (i) competitive recruitment of managers for each new company; (ii) development of human resources in accounting and audit functions; and (iii) establishing new financial management systems for each new company.
- ▶ Drafting a clear policy vision for the sector, including plans for restructuring.
- ▶ Evaluating subsidies including an analysis of the distribution of the benefits and development of an institutional mechanism to work out cross indebtedness.

Medium Term

Transport

- ▶ Improving and modernizing the Ranchi Airport.
- ▶ Assigning user charges and road transport improvements.
- ▶ Creating a computerized management information system (MIS), for state and rural roads to inventories, and then managing assets more effectively as well as concurrent reforms in business procedures in procurement, supervision, monitoring and financial control.
- ▶ Developing an Inland Container Depot (ICD)/dry port for completion of all customs formalities for imports and exports, with direct connectivity to Kolkata and Haldia ports.

Water Supply and Sanitation

- ▶ Investment in key business processes such as MIS, data collection, financial management and procurement procedures of the Drinking Water Supply (DWS) department, sector NGOs, and other key players.
- ▶ Ensuring that all sector funding streams are integrated into a single financial structure overseen by one body.

Irrigation

- ▶ Designing an investment plan based on a robust set of data used in a Decision Support System (DSS) model with appropriate cash flow forecasts.
- ▶ Community participation and involvement of all stakeholders to enhance accountability.
- ▶ Up-scaling of irrigation infrastructure to improve productivity of water and land through agricultural intensification and diversification to income-earning crops that can be grown with limited water, using improved irrigation and agricultural technologies.
- ▶ Completing of ongoing schemes as quickly as possible in a rational manner.
- ▶ Developing hydropower for increased irrigation through groundwater exploitation by shallow or open dug wells.
- ▶ Focusing on minor irrigation along the lines of the Gram Bhagirathi Yojana, with emphasis on participatory irrigation management.
- ▶ Groundwater exploitation should be through dug well and shallow tube wells and should not be more than the recharge.

Power Sector

- ▶ Developing business turnaround strategies for each company.
- ▶ Increasing transparency and accountability of new power companies to a broader range of stakeholders.
- ▶ Establishing commercial transactions between financially independent companies, including power purchase agreements between the generation and distribution companies and a separate licensing and tariff regulation for each new company.
- ▶ Creating opportunities for new lower cost entrants to provide power generation and electric service in rural areas.
- ▶ Increasing investment in the sector by improving sector finances, which will in turn improve the range of financing options.

Short- and Medium-Term Policy... (Contd.)

C. Addressing Issues in the Mining Sector

Short Term

- Finalization of the draft of the India Mining Development Policy.
- Strengthening the capacity of the Jharkhand Pollution Control Board to monitor and enforce compliance of the legal and regulatory framework.
- Decentralizing responsibilities to regional offices and upgrading administrative and technical skills.
- Amending the Indian Coal Bearing Areas Act to permit private investment in the coal sector.

Medium Term

- Rationalizing consent management based on environmental risks and re-allocating resources towards more effective inspection and monitoring.
- Shortening the permit process by eliminating discretion in the implementation of the law.
- Reducing speculation and encouraging active exploration through structured license fees.
- Introducing a modern, computerized, on-line, rules-based mining rights cadre to enable quicker and transparent access to minerals and securing appropriate mining titles on a "first come first serve basis".
- Preparing guidelines for environmental impact assessments, environmental management and community development plans.
- Addressing compensation issues in consultation with all stakeholders, especially local communities.
- Preparing a consultation framework to facilitate rational land use planning, community development and sharing of benefits between local and indigenous peoples, and the dual use of designated forest areas with progressive rehabilitation and afforestation.
- Improving transparency and revenue management by adoption and implementation of the principles of the Extractive Industries Transparency Initiative (EITI).

D. Improving Governance and Service Delivery

Short Term

- Curbing premature transfers by: (i) introducing computerized transfer processes at lower levels; (ii) creating a statutory civil services board at higher levels of the system; (iii) establishing a computerized database to track transfers and monitor compliance with a three-year average tenure norm and (iv) imposing quantitative caps to limit transfers.
- Revising manuals for the greater use of information technology and recasting of secrecy provisions to ensure consistency with the Freedom of Information Act (2005).
- Ensuring greater accountability and transparency through e-governance and full implementation of the Right to Information legislation.
- Strengthening the presence and quality of block administration through more visits to the districts and blocks by senior government officials.

Medium Term

- Clustering departments to improve functional efficiency with a minister and principal secretary for each cluster.
- Removing schemes of marginal value, curtailing unproductive expenditures and making monitoring more effective through zero-based review of all schemes.
- Improving performance and career management, moving towards a merit-based civil service, with an improved performance management system of Grade I and Grade II officers.
- Amending existing state legislation contradicting the central PESA Act or the Jharkhand Panchayati Raj 2001 Act and ensuring compatibility between the two.
- Devolving real power and resources to PRIs through administrative and fiscal measures.
- Clarifying the powers of different tiers of the PRI system through an activity mapping exercise involving critical line departments, elected PRI representatives, and NGOs and publicizing them through training sessions with the media.

Short- and Medium-Term Policy... (Contd.)

- Placing teachers, para-medics and Primary Health Centre (PHC) doctors under the direct control of PRIs.
- Working with civil society groups to implement programs, train PRI representatives and evaluate public services.

E. Fiscal and Public Expenditure Management

Short Term

- Passing the Fiscal Responsibility and Budget Management Act (FRBMA) incorporating medium-term fiscal targets.
- Drawing up the Medium Term Fiscal Program (MTFP) to meet the FRBMA targets.
- Adopting expenditure control measures such as restrictions on the creation of new posts, rationalizing of existing posts and a ceiling on contingent liabilities.
- Create a separate Mineral Revenue Fund designed to support development activities, especially for supporting rural and social development, in order to ensure the effective use of mineral revenues, as untargeted funds run the risk of being used for less important purposes, besides encouraging corruption.

Medium Term

- Implementing the FRBMA and the MTFP targets.
- Following a realistic budgeting process involving line departments and reflecting policy objectives, leading to performance based budgeting within the context of a medium-term expenditure plan.
- Simplifying procurement rules, adopting electronic procurement, increasing oversight and monitoring and training programs for officials.
- Creating a Finance and Accounts cadre for treasuries, budget division and internal audit division and modernization of treasury functions.

G. Strengthening Human Development Strategies

Short Term

Health

- ▶ Strengthening the drugs management system and the health MIS.
- ▶ Using demand side financing, a means of transferring purchasing power to specified groups, for the purchase of health services.

Education

- ▶ Providing incentives such as conditional cash transfers (CCT) to households to send their children, especially girls, to school with enhanced emphasis on the completion of primary and secondary education.
- ▶ Filling up vacant positions with teachers possessing subject-specific knowledge for upper primary and secondary schools, additional teachers to ease the burden of multi-grade teaching in single-teacher schools, adequate female teachers and teachers who understand the local tribal language and are sensitive to the contextual culture.

Medium Term

Health

- ▶ Prioritizing available resources for: (i) priority health services (PHS) with focus on reproductive and child health care and improving maternal and child nutrition; (ii) focusing PHS on the poor; and (iii) extending financial protection to the poor against major illness.
- ▶ Human resource management including development of job descriptions and introduction of performance based management systems.
- ▶ Scaling up of the public health service delivery by public and private providers.
- ▶ Developing and strengthening organizations and systems such as planning and budgeting, financial management, quality assurance, monitoring, procurement and finally, regulation and accreditation.
- ▶ Promoting local oversight for delivery of public health services.

Short- and Medium-Term Policy... (Contd.)

Education

- ▶ Upgrading Education Guarantee Schemes (EGS) into primary schools in a phased manner.
- ▶ Providing the minimum pre-service and regular in-service training to teachers without formal teacher training.
- ▶ Analyzing the tenure, qualification requirements, standardization, selection, appointment, pre-service and in-service training of para-teachers.
- ▶ Setting up of the State Institute of Education Management and Training (SIEMAT) and strengthening the links between all these support systems.
- ▶ Provide technical support to the State Institute for Education Research and Training (SIERT) and State Institute of Educational Management and Training (SIEMAT) in curriculum revision, textbook development, and training of trainers training at the district level, and strengthening capacity for research and evaluation.
- ▶ Addressing under-spending of Sarva Shiksha Abhiyan (SSA) allocations and identifying activities using the innovative grants in SSA aimed at introducing state-specific interventions.
- ▶ Promoting public-private partnerships, especially at the secondary level since 10 percent of the total schools are under grants-in-aid.
- ▶ Increasing private institutions under grants-in-aid.
- ▶ Expanding the vocational education sector.