TRANSFORMING JHARKHAND

THE AGENDA FOR ACTION

Report of the Chief Minister's Committee for the Development of Jharkhand

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Executive Summary

1. Jharkhand is a state with immense opportunities but unmet expectations. These opportunities can be unlocked with a comprehensive reform process that has the following elements.
    a. Have an inclusive agenda of development where the requirements of the masses are at the forefront of administrative action. This includes employment and self-employment avenues, basic needs and requirements, and safety and security.
    b. Strengthen and make more efficient the ability of its administration to deliver a good environment for (i) living and (ii) earning. This requires creating an economic ecosystem that facilitates entrepreneurship for large, medium, small and micro enterprises; both in the organized and unorganized domains.
    c. Ensure a 360 degree monitoring of government actions; this requires monitoring within the government as also by outside entities. The government and its senior functionaries need to be answerable to the people of the state.

2. To reiterate, the Committee believes that the only way by which long term economic development can be sustained is if all segments of society are a part of that process. Hence development should not be confused with industrialization or corporatization. Industrialization is but one element of a much larger process of improvement in lifestyles, 7opportunities and the environment.

3. In line with these objectives the report establishes the following principles.
    a. The first set of reforms should be able to generate improvements in growth and also government tax and non tax revenues within a short span of time. These can then be used to invest in efficiency improvements. A virtuous cycle needs to be created, with benefits from actions in one stage used to generate greater benefits in the next.
    b. The ability to move on a path of greater progress is to a large extent dependent upon the ability of the government functionaries to perform individually and as a group. Hence improvement in administrative abilities of the state forms a significant part of this report.
    c. All round progress requires all round action; however human capital and expertise is limited both within and outside the government, and will take some time to build. Hence the state government needs to partner with organizations outside the state, these include sector specialist organizations such as NSDC, ILFS, NHB, IDFC, etc. At the same time Public Private Partnerships need to be accelerated in all domains.
    d. Decentralization is an established principle and needs to be made an integral part of the government's reform process. Greater delegation of responsibilities is required towards the local bodies (both ULBs and PRIs). Within the government lower tiers need to be provided greater decision-making powers. Moreover, many of the

functions and responsibilities can be delegated to private entities whether they are commercial, cooperatives and communities or non-profit organizations.

e. Civil society needs to be strengthened and that implies that the government needs to make interaction between NGOs and government functionaries an integral part of governance.

f. Greater information availability and citizen redressal is another synergistic component of this larger process. E-governance, information boards in rural areas, annual development reports; independent monitoring of government actions and their impact is another set of reforms that will be critical in guaranteeing sustainability of reforms.

4. Rapid economic growth is both an objective and an outcome of people oriented reforms. The committee estimates that with no reforms growth till 2025 will stagnate at about current levels, with limited reforms would be about 10 percent, but with deep structural reforms can be in the region of 15 percent annually. High growth will generate additional tax revenues that are many times the current tax revenues. This in turn can enable a far deeper set of investments in enhancing welfare and development expenditures.

5. The various sections recommend the following specific actions. For greater details refer to the indicated paragraph number in the main text.
   - Set targets for improvements in human development outcomes (poverty, education, health) that can be monitored (2.2.1)
   - Get JPSC and JSSC to prepare list of posts required in each Ministry/Department, including PRIs/ULBs (3.3.1)
   - Rationalize departments and streamline them (3.1.3 and 3.3.1)
   - Devolution of functions to local bodies (3.1.3)
   - Redefined role of secretaries greater delegation to lower levels in hierarchy (3.1.3)
   - Central deputations to be controlled better (3.1.3)
   - Increasing efficiencies in JPSC such as through objective tests (3.1.4)
   - Incorporate transparent definition of domicile and criteria for qualification (3.1.4)
   - JPSC to recruit higher level posts (3.1.5)
   - JSSC to recruit lower level posts (3.1.5)
   - Staggered (not in one go) appointments across all domains (3.1.6)
   - Contract technically qualified people at various layers of the government (3.1.6)
   - Reinventing role of DC towards welfare and development (3.2.1)
   - Creating separate position for revenue and magisterial functions (3.2.1)
   - Announce clear policy on promotions (3.2.2)
   - Improved career path for BDOs, COs, etc., promotion in 4 years (3.2.2)
   - Promotion should NOT be referred to JPSC or JSSC (3.2.2)
   - Vigilance clearance to be within 1 year, and if not available, automatically granted (3.2.2)
   - Incorporate career training and refresher courses across all levels in hierarchy (3.3.3)
   - Tie up with national and international institutions for better exposure (3.3.3)
   - Draft Jharkhand civil service (Executive Branch) rules that may be different from those in Bihar (3.2.4)
   - Revise Bihar Junior Civil Service (Recruitment Rules) of 1951 (3.2.4)

- Greater efficiency and power to Lokayukta and State Vigilance (3.2.4)
- Tenders only for amounts higher than Rs 50,000 (3.2.4)
- Quantitative cap on transfers annually across all levels in hierarchy (3.2.5)
- Public reporting of all transfers (3.2.5)
- All transfers to be vetted by the Service Establishment Board (3.2.5)
- Preference in transfers to locations of functionary's choice (3.2.5)
- Greater financial powers to departments through Financial Advisors (3.2.6)
- Multi-year budgeting (3.2.6)
- Performance targets for all departments – matching outlays with outcomes (3.2.6)
- Analysis of past performance (3.2.6)
- Monthly expenditure plan for all departments (3.2.6)
- No announcement of new projects/schemes unless funded for universal coverage (3.2.6)
- All within government for sanctions for the year to be given by April 15 (3.2.7)
- Performance appraisal of all state functionaries to be 360 degrees (3.2.8)
- Regular civil society and government interaction at state, district and block level (3.2.8)
- Zero based budgeting in all departments and schemes (3.3.1 and 3.3.5)
- Convergence of TSP and SCSP (3.3.3)
- Department of Tribal Affairs to bring out annual Tribal Progress Report with quantitative indicators (3.3.2)
- Invest in model villages for major SC and ST population (3.3.4)
- Focus on demand driven central schemes (3.3.5)
- Establish monitoring unit in CM's office with four cells – rural development (Swajaldhara, MGNREGS, Total Sanitation, NRHM, SGRY, SJGSY, ICDS, SSA, MDMS, RKVY); infrastructure (PMGSY, RGGVY, IAY)); urban development (JNNURM); and administrative delivery and finance (FRBM) (3.3.5).
- Proactive sharing of information by politicians, ministers, and bureaucracy (3.4.1)
- Social audit of development expenditure (3.4.1)
- Standardization of information requirements for certificates and licenses (3.4.3)
- Internet enabling form applications with forms available for free (3.4.3)
- Public Service Guarantee Act with clear deadlines for delivering public services (3.4.4)
- Start of *nagarika-sewa-kendra* or *e-niband* or *e-nagarika-sewa* (3.4.5)
- Enhance e-governance initiatives (3.4.6)
- Computerize treasury management fully (3.4.6)
- Incorporate file-tracker in day to day use of all departments and district administrations (3.4.7)
- Start dialogue with judiciary for improving and speeding up justice delivery (4.2)
- Arrears committee for dispute resolution particularly for criminal cases (4.3)
- Separation of powers between the forest departments administrative and judicial functions (4.3)
- Address problem of under-trials and free those accused of minor crimes (4.3)
- Remove excise duty on country liquor instead auction licenses for manufacturing country liquor (4.5)
- Announce a clear deadline for presentation of Jharkhand Police Act to the assembly (4.5)
- Improvement in citizen-police interface (4.5)
- No CRPF camps in any government buildings (4.5)

- Focus on improving quality of prisoner reform by investing in new facilities (4.6)
- Consider selling off old jail lands and building new facilities outside cities (4.6)
- Incentivize Aadhar enrolment (5.1.4)
- Consolidate all Village-level committees under Village Development Committee (5.1.6)
- District development plans to be facilitated by bringing in specialist organizations such as ILFS (5.1.6)
- Half of MLA funds to be only for schemes that fit the district plan (5.1.6)
- Modern PRI office for every panchayat down to the Gram Panchayat level (5.1.6)
- BPL households to be identified in a decentralized and participatory manner (5.2.1)
- Approach World Food Programme for setting up grain banks (5.2.2)
- Use ICT infrastructure to improve PDS (5.2.2)
- Use of SHGs for distributing PDS commodities along with flexibility of user to choose provider (5.2.2)
- Develop a grain bank in PPP mode (5.2.2)
- Involve NGOs in MDMS, ICDS and health care initiatives (5.2.3)
- PPP in social sector to include renting government facilities to private providers (5.3.1)
- Well functioning *Rogi Kalyan Samitis* (RKS) would help improve health care delivery (5.3.2)
- Incentivize health care workers for rural and LWE areas (5.3.3)
- Mandatory social audit of MNREGA with independent ombudsman for all districts (5.4.2)
- Bank and post office outlets obligatory in all *haats* to dispense MNREGA payments (5.4.2)
- For next three years prioritize all MNREGA works towards de-siltation and renovation of water bodies (5.4.3 and 7.3.6)
- MNREGA funds for skill up-gradation programs, choice to worker (5.4.4)
- Pass Jharkhand Municipal Bill (6.4)
- Strengthen ULBs through training of ULB functionaries in administration and accounting (6.4 and 6.6)
- Set up State Finance Commission (6.5)
- Develop and enforce master-plan for all major urban areas and make them public (6.4)
- Introduce Jharkhand Municipal Bill (6.5)
- Improve user charges in urban areas through various mechanisms (6.6)
- Strengthen ULBs abilities to be independent of Department of Urban Development, and able to encourage and enable PPPs (6.6)
- Create a Local Body Cadre or a Municipal Officers Cadre (6.6)
- Auctioning of unused or sub-optimally used government land and fund expenditure on roads and affordable housing (6.7)
- Housing Policy to be formulated with help from National Housing Bank with greater focus on EWS and LIG segments (6.8)
- Consolidate government-owned land in urban areas, sell off land and use proceeds to create integrated office complexes (Government offices close to each other) (6.8)
- Invest in highways from own funds for critical national highways (7.1.3)
- Jharkhand State Road Development Fund set up from cess on fuels (7.1.4)
- Announce a clear PPP policy for roads (7.1.5)
- Additional funds to be generated for road improvements through other means (7.1.5)

- Adopt output and performance based long term maintenance contract (7.1.6)
- Better separation of responsibilities and coordination between REO and RCD (7.1.6)
- Create autonomous Infrastructure Board (7.1.7)
- Project to be started only after land is acquired (7.1.8)
- Strengthen the JRRDA and ensure greater inter-agency coordination (7.1.8)
- Establishment of entity to administer road fund only for road building and maintenance (7.1.8)
- Explore the possibility of redeploying surplus engineers from other departments such as irrigation towards roads (7.1.8)
- Contract junior engineers to be hired for short term requirements (7.1.8)
- Outsource DPR preparation (7.1.8)
- Lay down clearly the template for quality policy, quality assurance plan, and quality audit (7.1.8)
- Use flying squads to monitor and enforce road building norms (7.1.8)
- Improve monitoring mechanisms using mobile and GPS technologies for road building and mechanism (7.1.8)
- Modernize RCD, improve account codes and work manuals in line with central framework (7.1.8)
- Greater load bearing norms for roads in mining and manufacturing areas to ensure greater life (7.1.9)
- Axle weighing stations at the loading points should be mandatory in mining and manufacturing areas to ensure against overloading (7.1.9)
- Well functioning check-posts in inter-state borders (7.1.9)
- There should be a 10 percent 'green tax' on all commercial vehicles (7.1.10)
- Scheme to improve transport connections in the rural areas through *grameen seva* (7.1.10)
- Exempt districts with power plants of over 1000 MW to be exempt from power cuts (7.2.4)
- Exempt areas within 5 km radius of all power plants greater than 10 MW from power cuts (7.2.4)
- Bankable projects with all clearances duly obtained before bidding and use PFC as lead agency (7.2.5)
- Introduce open competitive bidding with a single bid criteria, having both long term and merchant sale component (7.2.6)
- Do not limit power only to coal based (7.2.7)
- Approach PETRA for allocating gas to the state at an affordable price (7.2.7)
- Invite private sector to build new transmission lines on an annuity basis funded through a cess on generation (7.2.8)
- Form separate company for power evacuation with IDFC (7.2.9)
- Create third party intermediation through an integrated network (7.2.9)
- Mandatory filing of ARRs by JSEB to JSERC (7.2.10)
- Distribution in major urban clusters should be franchised and government should focus on rural areas (7.2.11)
- Small distribution companies or community based organizations/cooperatives to distribute power at substation level (7.2.12)

- Focus on Restructured Accelerated Power Development and Reform Program (7.2.13)
- Procure power through Case One bidding (7.2.14)
- Open access needs to be implemented and charges should be formulated urgently (7.2.14)
- Provide power first to all those in state BPL list without any approvals from JSEB/NTPC (7.2.15)
- Formulate Rural Electrification Plan and involve PRIs in monitoring (7.2.16)
- State government to notify dispensing of formal license requirement for generation of power in rural areas as per the Electricity Act 2003 (7.2.17)
- Consider Jyotigram scheme in Gujarat as a template for providing electricity separately for domestic and commercial purposes (7.2.18)
- Set the stage for unbundling JSEB urgently, take West Bengal's experience as a model of doing so (7.2.19)
- Electronic metering should be 100% not only at the end points but also within the grid (7.2.20)
- Performance linked incentives, gain from reduction in AT&C should be monetized and a share given back to employees as incentives (7.2.20)
- JSEB to have to legal powers to recover its dues (7.2.20)
- Develop a comprehensive Non-conventional Energy Policy that incorporates separate policies for solar, biomass, wind, small hydel, geothermal, etc. (7.2.21)
- Mandatory that at-least 3 percent of states power purchase from non-conventional energy sources by 2014 (7.2.21)
- JSERC should set tariffs for wind bio-mass and solar and hydro-power to incentivize production from these routes (7.2.21)
- JREDA should be revamped and strengthened (7.2.21)
- Investigate avenues for geo-thermal energy and come up with policy (7.2.21)
- Participatory irrigation management through setting up Water User Associations (7.3.2 and 7.3.6)
- Consider incorporating the template of RG Watershed Management Mission of Madhya Pradesh (7.3.3)
- Increase irrigation outlay to 10 percent of plan expenditure (7.3.4)
- Expedite plans to link rivers (7.3.4)
- Lift irrigation schemes need greater focus, institutional support and budgetary allocations (7.3.5)
- Review all irrigation laws including Bihar Cultivation and Irrigation Act of 1955 (7.3.6)
- Water rates need to be revised and at-least Rs. 45 per thousand gallons for industrial purposes (7.3.7)
- Jharkhand should submit proposals for purchasing and acquiring private lands for IAY (7.4.1)
- The list of all beneficiaries should be publicized should be publicized in every village (7.4.2)
- Partner with NHB to assist in developing low cost housing options (7.4.2)
- Set up Jharkhand Institute of Educational Planning and Administration, independent of JCERT (8.1.3).

- Ensure all habitations have primary school within 1 km and upper primary within 3 km (8.1.3)
- No single teacher schools or multi-grade teaching (8.1.3)
- Timeliness of funds for maintenance and payment to teachers (8.1.3)
- More women teachers and toilets for girls in all schools (8.1.3)
- Good quality school infrastructure and teaching materials to be guaranteed in all schools (8.1.3)
- Ensure improvement of transition to upper primary schools (8.1.3)
- Alternative Learning Centres and *Shiksha Karmis* to be set up to ensure mainstream all out of schools children (8.1.4)
- Strengthen community participation and management of schools for eventually complete community management of primary schools (8.1.4)
- Remove hurdles in setting up private schools (including community and NGO) (8.1.4)
- Outsource management of schools to private entities (8.1.4)
- Develop long term agenda for improvement of secondary schools (8.1.4)
- Encourage schools to teach English beyond 8th standard (8.1.4)
- Pass Private Universities Act (8.1.5)
- Privatize employment exchange functions (8.1.5)
- Universities to be strengthened in their regulatory functions (8.1.5)
- Avoid setting up new government funded Universities and ensure current ones are better funded (8.1.5)
- Encourage setting up of affiliate colleges of Universities in private sector (8.1.5)
- State-level Private Universities Act with appropriate regulations and disclosure norms (8.1.5)
- Introduce vocational education in schools, especially beyond Standard VIII (8.1.8)
- ITI-s should be upgraded and extended to areas where they are absent (8.1.8)
- Facilitate a polytechnic in every sub-division (8.1.8)
- Skill Development Centres (SDC) in every block or at least District (8.1.8)
- Each of these initiatives in the PPP mode where ability to place is the key criteria for partnering (8.1.8)
- Consider handing over existing public sector vocational training infrastructure to the private sector for management (8.1.8)
- In PPP mode only one-time capital grants to private institutions and stipends or fee subsidization for SC/ST/OBCs and BPL students (8.1.8)
- Better access central government funds for programmes with skill development components (8.1.9)
- Consider appropriate recognition for for-profit skill development initiatives and also those for companies' internal training initiatives (8.1.9)
- Reforming of employment exchanges and allow private sector participation in this domain like Gujarat and Rajasthan (8.1.10)
- Permit private training organizations to offer training at employment exchanges as in West Bengal (8.1.10)
- Extend the coverage of "job" or *rojgar mela*s in partnership with private placement agencies as in Rajasthan (8.1.10)

- Partner with NSDC in skill development; vocational training providers funded by NSDC have to demonstrate increases in income (through wage or self-employment) (8.1.11)
- Incentivise self-registration of out-migrants and in-migrants (8.1.11)
- Encourage diversification and commercialization of agriculture (8.2.1)
- Remove government imposed restrictions on production, marketing and distribution; allow corporate sector involvement in agriculture; consider allowing contract farming; and dis-intermediation of distribution chains (8.2.1)
- Refocus public expenditure away from input subsidies to infrastructure and extension services, revamping credit and insurance mechanisms, and freeing up of land markets (8.2.1)
- Rural roads, water harvesting and groundwater recharge, rural power, agricultural marketing and extension services can drive very high rates of growth (e.g. 9.6% in Gujarat since 2000) (8.2.2)
- Linking farmers to markets is crucial to promote agricultural growth, follow Gujarat template of amendments to APMC Act in 2007 allowing direct marketing, contract farming and markets in private/co-operative sectors (8.2.2)
- Work with agricultural universities, NGOs/civil society organizations and companies for providing extension services and removing knowledge gap of farmers (8.2.2)
- Upgrade all 575 major *haat*s and also the minor ones by providing basic infrastructure (8.2.3)
- Combine above with model village scheme and up-gradation of Panchayats (8.2.3)
- Consider model of Rythu Bazars in Andhra that operate outside APMC Committees that eliminate middlemen and provide direct links between consumers and farmers (8.2.3)
- Subsidized loans to SHGs or cooperatives to purchase vehicles for transporting produce to such markets (8.2.3)
- Re-examine Jharkhand Rehabilitation and Resettlement Policy of 2008 (8.2.4)
- Recognition that negative externalities from projects impact livelihoods outside the project site (8.2.4)
- Periphery development for a geographical area that is 15 km around the project site (8.2.4)
- Consider compensation to be extended to those who are outside the project site, but inside the periphery (8.2.4)
- Comprehensive and independent social impact assessments essential for every project (8.2.4)
- Use remote sensing and GPS technologies to ensure ongoing monitoring of such activities (8.2.4)
- Without diluting the non-transfer provisions, the CNTA and SPTA should be reviewed from the perspective of protecting the interests of STs (8.2.4)

- The SAR process should be improved, so that alienated lands (other than those through land acquisition for public purposes) are restored (8.2.4)
- Land records need to be updated, modernized and computerized (8.2.4)
- A comprehensive exercise to identify land that is owned by the government, and common lands, since most waste and fallow land seems to belong to this category (8.2.4)
- Consider granting titles to common land under private cultivation and not as encroachments (8.2.4)
- Corporate demands for land acquisition should be studied carefully as many times they are far in excess of requirements (8.2.4)
- Outside of SPTA areas government intervention through LAA should be avoided except for public use (8.2.4)
- Plan for a consolidation of land exercise that helps merge small land-holdings (8.2.4)
- Investigate possibilities to open up land availability for tenancy and leasing (8.2.4)
- Obtain details of land acquisition, compensation and rehabilitation by CCL, BCCL, ECL, HEC (8.2.4)
- Overhaul the Bihar Forest Produce (Regulation of Trade) Act of 1984 and its rules, the Bihar Private Forest Act of 1947 and its rules and the manual of Bihar Forest Laws; no tribals to be booked as encroachers in forest lands (8.3.1)
- Remove controls on movement in forests and ensure tribal community participation in forest management (8.3.1)
- Immediately map mineral bearing areas and then map “go” and “no go” areas on top of these (8.4.4)
- Obtain the forest clearance procedure approved before giving out the mining lease (8.4.4)
- Laws to protect water catchments from mining areas (8.4.4)
- Excavation from new pit should start only after the first is exhausted (8.4.4)
- Mine closure should be made mandatory for all minerals (8.4.4)
- The cash composition needs to be increased, with asset value determination based on future anticipated prices and there should be policy for annual compensation as a regular source of income (8.4.6)
- Self employment such as facilitating contracts for operating trucks and other equipment as a part of R&R (8.4.6)
- Immediate steps to record small and medium mines through extensive surveys and remote sensing technologies (8.4.7)
- Bring small and medium scale mines under the ambit of a legal framework. (8.4.7)
- Introduce development cess on mines, link price with market prices of minerals on metal exchanges, with equal royalty rates for captive mines (8.4.8).
- Joint management of mining along the lines of JFM spliced with PRIs. (8.4.9)

- Special Development Fund should be created and 5% of royalty collected from major minerals should be used for the development of that particular block. (8.4.9)
- Create land banks in all the districts to demarcate them as industrial estates (8.5.3)
- Recover land not used by PSUs (8.5.3)
- The state should come up with new Industrial policy (8.5.4)
- Amend labour legislation and rules (8.5.4)
- Modernize and build Jamshedpur and Deogarh/Dumka airports (8.5.4)
- Develop 12 SME clusters and interventions have to be in the form of a complete package (8.5.6).
- Introduce purchase and price preference in government procurement for SCs/STs (8.5.7).
- Hold an Investor Summit and focus of such summit should also be on physical infrastructure, health and education (8.5.8)
- Energize the Centre for Fiscal Studies (9.1)
- The state should implement FRBM Act passed in May 2007 which requires the fiscal deficit/GSDP ratio to be no more than 3% and the revenue deficit to be eliminated. (9.2)
- Capital expenditure needs to increase to something approaching 8% of GSDP (9.3)
- The present debt/GSDP ratio is around 31% and there should be a conscious time bound attempt to reduce this to 28% (9.3)
- All state PSUs should be subjected to hard budget constraints and need to finalize their accounts (9.3)
- Evolve a clear dividend policy that requires the PSUs to pay dividends to the state (9.3)
- Fiscal reforms to be targeted at increasing non-tax revenue/GSDP ratio and not necessarily from mining; this is doable by imposing appropriate user charges (9.4)
- Capital Receipts can have an additional channel through privatization of PSUs and sale of land (9.4)

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Section 0: Preface

0.1 A Committee for drawing up a development plan for Jharkhand was set up on 1st November 2010, with the mandate of preparing a report. This Committee consisted of Bibek Debroy, Laveesh Bhandari and Vishal Singh. The Committee has benefited enormously from talking to people in and outside Jharkhand, in and outside Ranchi, from within the government and from outside it. This report is thus based not only on the inputs of the three Committee members, but also the collective wisdom of all these individuals and organizations. A complete list is appended in Annexure 1 and the Committee is indebted to these individuals and organizations, as well as to representatives of Jharkhand government.

0.2 The critical question is how does one ensure all round and inclusive development of Jharkhand and progress of its people? Within that larger issue a number of questions are contained and addressed in this report. (1) What kind of GSDP growth should Jharkhand aspire towards, in the years leading up to 2025? (2) Since growth and income are not ends in themselves, what does this mean in terms of human development? (3) How does one tap the human resource potential? Specifically, what should one do in education, skills and health? (4) How does one tap the natural resource (land, forests, minerals, water) for the welfare of the people living in the vicinity and being sustained by them, without sacrificing the cause of the environment? What is the road map for developing agriculture, forestry, mining and industry? (5) How does one improve the physical infrastructure, specifically, roads, water and electricity? (6) In each of these, how does the State vacate areas that the private sector will step into? When public expenditure is necessary, is it possible to separate public expenditure from public provisioning? Are there best practice lessons from other States? (7) To the extent public expenditure is needed, how does one generate the resources? How does one devolve downwards to panchayati raj institutions (PRIs) and urban local bodies (ULBs)? (8) How does one improve administrative delivery? This is an issue not just for traditional government, but also for PRIs and ULBs. (9) How does one address Centre-State issues?

Section 1: Jharkhand – Where Do We Stand Today?

1.1 15th November 2000 was more than ten years ago. That day, the Bihar Reorganization Bill gave birth to Jharkhand as India's 28th State, carving it out of what was the southern part of Bihar. There was hope because there was potential. Government and governance are about providing public goods like law and order, physical infrastructure, social infrastructure and anti-poverty programmes, about providing an enabling environment that permits growth and brings prosperity to Jharkhand's citizens. These are optimally provided at a certain size, and not above or below it. A State can become too large to deliver these optimally. A State can be too small to generate economies of scale and scope in delivering these public goods. From a governance perspective, despite some inhospitable terrain, Jharkhand is just about the right size. In the 2001 Census, the population was 26.9 million, spread over a little less than 8 million hectares. That is a population density of 338 today people per square km. Once the results of the 2011 Census are known, the population will be larger, probably around 32 million. But that does not matter. Whether in terms of geographical area or in terms of population, this is neither too large, nor too small.[1]

Figure 1.1: Districts of Jharkhand

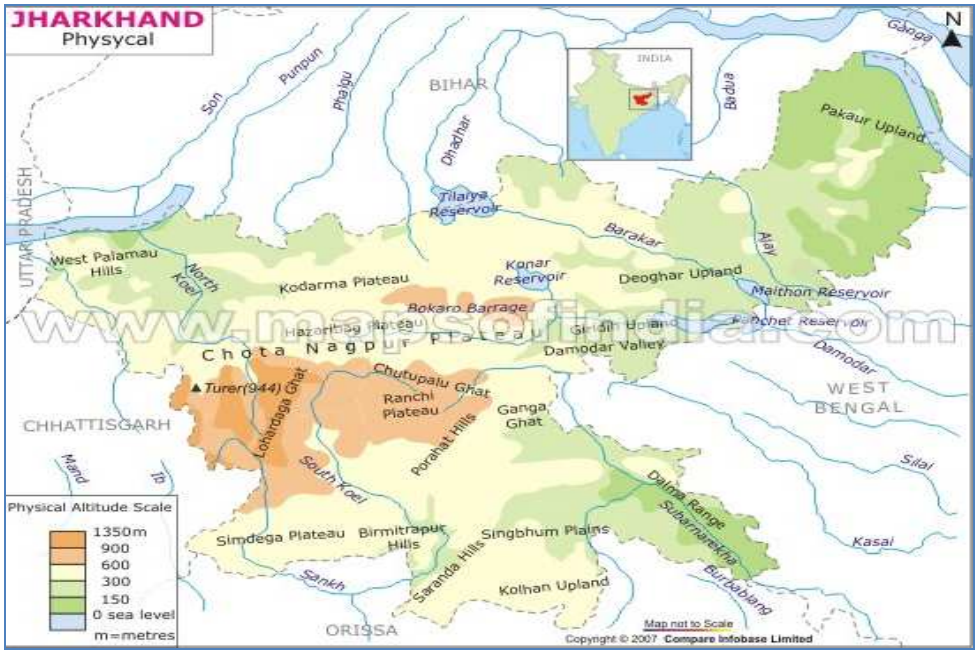
Source: Government of Jharkhand

1.2 There was hope because Jharkhand is a rich State. It is rich in minerals. 40% of India's minerals come from Jharkhand. Coal, iron ore, copper ore, kyanite, fire-clay, graphite, kaolin, black granite, apatite rock phosphate and cobalt – for each of these, Jharkhand accounts for more than 5% of India's mineral deposits and there are other minerals too. Jharkhand has forests that are rich in flora and fauna and a variety of major and minor forest produce are grown. The annual precipitation is a little over

[1] Jharkhand's share in India's geographical area is 2.42% and its share in India's population is 2.6%.

the national average and there are major rivers (Subernarekha, Damodar, Barakar, South Koel, North Koel, Shankh, Ajay, Mayurakshi, Gumani, Kharkai, Khanhar) and river basins. Rice, wheat, maize, oilseeds, pulses and millets are grown. There is horticulture, animal husbandry, dairy, poultry, sericulture and fisheries. There is a strong industrial base in Ranchi, Jamshedpur, Dhanbad and Bokaro. A road and rail transport infrastructure cuts through the State, connecting Bihar with Orissa, and Chhattisgarh with West Bengal. There are airports too, actual and potential. Jharkhand is strategically poised to lead the drive towards growth and economic prosperity in the eastern part of India.

Figure 1.2: Physical Map of Jharkhand



Source: www.mapsofindia.com

1.3 In the decade since the State was formed, those hopes have turned into ennui and despair. The potential energy has not been automatically transformed into kinetic energy. One should not form the wrong impression. It is not the case that there has been no growth in Jharkhand. The 1991 reforms and their aftermath brought the promise that the country would be unshackled. In some States, growth picked up in the 1990s. In others, growth picked up in the early 2000s. If there is migration, GSDP (gross State domestic product) is not the same as gross State income and is at best a surrogate indicator. The decadal (1991 to 2001 Census) migration rates show that Jharkhand is a State from which there is out-migration, especially for males. However, migration statistics are unreliable and don't capture the entire story. For instance, these decadal rates do not capture seasonal and temporary migration. Indeed, this is symptomatic of the development challenge that Jharkhand confronts. Why should there be distress migration out of the State? This is fundamentally involuntary migration and occurs because there aren't enough economic

opportunities within the State. Citizens have to move out to better their lives. The developmental challenge is one of altering the economic environment so that people don't migrate out of Jharkhand. They migrate to Jharkhand instead.

1.4 Having said this, what has been Jharkhand's GSDP record? It is somewhat difficult to drag the series back and apportion out to a period when Jharkhand was united with Bihar. But during the Ninth Plan (1997-2002) average annual real GSDP growth was estimated at 1.08%. This increased to 9.12% during the Tenth Plan (2002-07) and lest we forget, the target set for Jharkhand during the Tenth Plan was only 6.9%.[2] In fact, in the first few years of the Tenth Plan, Jharkhand's growth was nothing short of remarkable. Between 2002-03 and 2005-06, real growth was an impressive 11.1%.[3] Given this, at 9.8%, the target set for the Eleventh Plan (2007-12) seems conservative. It is a separate matter that growth has slowed since 2006-07. For instance, GSDP growth in constant prices was 6.18% in 2007-08 and 5.52% in 2008-09, compared to the 12.53% in 2006-07, largely explained by a drop in the primary sector.[4] The mid-term appraisal of the Eleventh Plan reports real GSDP growth of 8.2% during the Tenth Plan and an expectation of 9.8% during the Eleventh.[5] While that can be questioned given some deceleration in growth, the issue isn't only one of increasing growth rates. It is also one of reducing the volatility in growth. However, the figures from the high growth years do illustrate the potential. If the growth momentum is restored, it should be possible to touch long term real rates of growth of 10% with limited reforms and much more with reforms that increase efficiencies and generate opportunities for the common man, and without the variability and fluctuations seen in the past. In 2008, the last year for which figures are available, the natural rate of growth in population was estimated at 1.87%.[6] If one takes away 1.9% from real growth of 10%, one is left with a per capita growth of 8.1%. This is not insignificant and, if sustained, can transform Jharkhand's economy and society, and the nature of its poverty within the next 10 to 15 years.

1.5 To reiterate, there is a growth momentum across the country, and there is also one in Jharkhand. However if one compares the earlier part of the 2000s with the latter half, there is a slight stagnation in growth. This is reflective of the conditions within Jharkhand. Growth in the long term is expected to stagnate at around 8 percent if no reforms occur. With limited reforms this can accelerate to about 10 percent, but

[2] The Ninth and Tenth Plan figures are from *Draft Annual Plan 2010-11,* Planning and Development Department, Government of Jharkhand. The target for the Tenth Plan is from Vol.1 of *Eleventh Five Year Plan (2007-2012)*, Planning Commission, Government of India and Oxford University Press, 2008. In GSDP type of figures, the base year change from 1999-2000 to 2004-05 has led to some anomalies between CSO and State government figures and these are yet to be reconciled. For instance, there is an inexplicable gap in the forestry and logging figures.

[3] Planning Commission, *ibid.*

[4] *Estimates of Gross/Net State Domestic Product and District Domestic Product of Jharkhand*, Planning and Development Department, Government of Jharkhand.

[5] *Mid-Term Appraisal of the Eleventh Five Year Plan*, Planning Commission, 2010.

[6] *Jharkhand: A Statistical Profile – 2009*, Planning and Development Department, Government of Jharkhand.

that will also be far below Jharkhand's potential. With deep structural reforms, aimed at bringing into the mainstream all segments of society, and improving governance efficiencies, a potential exists of about 15 percent long run annual growth. This should be the target for Jharkhand.

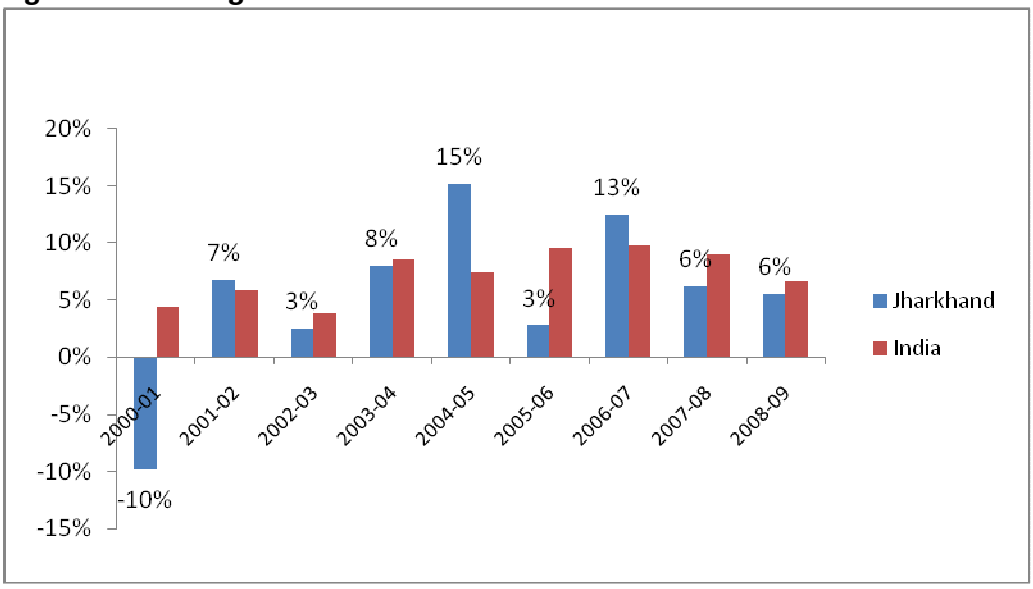
Table 1.0: Long Term Growth Potential of Jharkhand

		Past Growth Trends			Growth with NO REFORMS		Growth with LIMITED REFORMS	Growth with SERIOUS PEOPLE ORIENTED REFORMS	
	Sectors	00-01 to '08-09	00-01 to '04-05	04-05 to '08-09	2009-2025-26	Why Slowing Growth?	2009-2025-26	2009-2025-26	Impact of Reforms on Growth
1	Agriculture	-1	2	-2	1.0	Stagnating agriculture	2.0	5.0	Improvements in irrigation & mktg. infra.
2	Forestry & logging	5	12	6	3.0	Limited avenues for forestry products	5.0	10.0	Marketing networks and better JFM
3	Fishing	19	-2	34	5.0	Drying water bodies	7.0	12.0	Greater water bodies and PRI involvement
4	Mining & quarrying	0	3	0	0.0	Opposition to new mining	3.0	8.0	A more inclusive approach to R&R
5.1	Manu-Registered	17	22	12	10.0	Governance bottlenecks	13.0	18.0	Better land availability
5.2	Manu-Unregistered	5	3	8	10.0	Limited demand within Jharkhand	10.0	15.0	More opportunities for the masses
6	Construction	11	10	8	10.0	Slowing overall economic growth	10.0	15.0	Resurgence in small towns and rural areas
7	Electricity, Gas & Water	0	1	3	1.0	Delayed projects and investment	3.0	10.0	Greater investment
8.1	Railways	11	9	12	10.0	Freight growth not possible without significant ec. gr.	10.0	15.0	Greater economic activity
8.2	Transport by other means	7	5	8	10.0	Momentum of pvt. transp. & rural roads	10.0	15.0	Greater economic activity
8.3	Storage	5	0	8	5.0	Limited agri & slowing manuf. gr.	7.5	10.0	Demand from forestry and agro processing
8.4	Communication	23	18	27	10.0	Momentum of new technologies	15.0	20.0	Greater economic activity
9	Trade, hotel, restaurants	9	11	6	8.0	Correlated with overall GDP growth	10.0	15.0	Highly correlated with overall GDP
10	Banking & Insurance	8	3	15	8.0	Credit correlated with governance	10.0	15.0	Greater economic activity plus MFI
11	Real estate & business ser.	9	7	10	10.0	Reducing slack	10.0	15.0	Correlated with credit, repatriation and road building

		Past Growth Trends			Growth with NO REFORMS		Growth with LIMITED REFORMS	Growth with SERIOUS PEOPLE ORIENTED REFORMS	
12	**Public administration.**	2	5	1	**3.0**	Ltd. ability of state to afford greater	**5.0**	**10.0**	Greater tax revenues and removal
13	**Other services**	6	-3	8	**5.0**	Staffing & development schemes	**5.0**	**10.0**	of staffing & development bottlenecks
14	**GSDP**	8	7	7	**8.0**	*Counted among laggard Indian states*	**10.0**	**15.0**	*At forefront of all states –inclusive development*

Note: Estimates based on Data from CSO and author analysis of inclusive growth enabling conditions in Jharkhand and nationally. Growth estimates of GSDP at factor cost in 1999-00 prices. Growth Trends based on logest command in MS Excel.

Figure 1.3: GSDP growth – Jharkhand and India in the 2000s



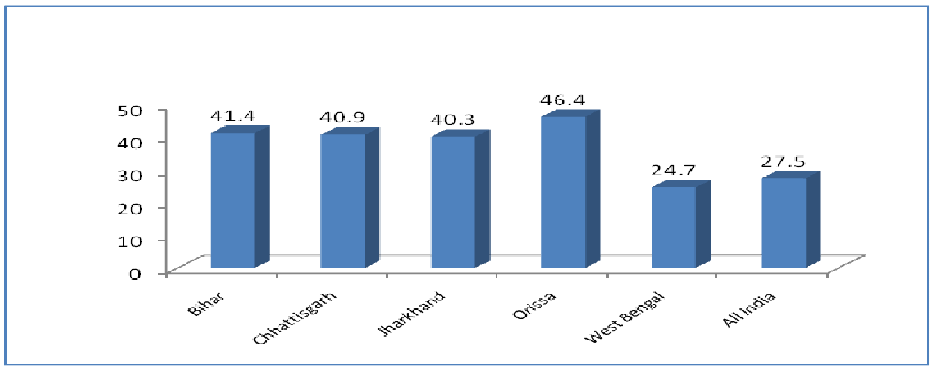
Source: Estimations using Data from Central Statistical Organization

1.6 As of today, the poverty is considerable. There are alternative ways of defining poverty, income or expenditure poverty not being the only one. The conventional method has been use of a poverty line and use of NSS (National Sample Survey) data, on the basis of which poverty estimates are worked out by the Planning Commission. The last such NSS large sample was in 2004-05. On the basis of this, 46.3% of rural Jharkhand (10.3 million people) was below the poverty line in 2004-05, with a figure of 20.2% for urban Jharkhand (1.3 million people).[7] Overall, 40.3% of Jharkhand was below the poverty line (BPL). How backward and poor is Jharkhand? There are two different ways of answering this question, though they are related. The first is absolute, while the second is relative to other States of the country. For instance,

[7] These are the uniform recall period (URP) figures, Planning Commission, Government of India.

the absolute BPL figure of 40.3% has already been mentioned. This is unacceptable, even in absolute terms. But this becomes even more so, when one realizes that the all-India BPL figure was 27.5%. While on poverty, there is conflict and differences in methodology across different sets of figures. The Planning Commission figure, just cited, is based on the traditional poverty line, and is calculated primarily through food expenditure, with a little bit thrown in for clothing, since at the time when the poverty line was devised, it was felt that consumption items like education and health would be provided for by the State and need not therefore figure in private consumption baskets. It is a separate matter that post-1991, even among poor households, private expenditure on both health and education have increased. Refining the poverty line, but using the 2004-05 data, the Tendulkar Task Force increased the BPL head-count ratio for Jharkhand to 45.3%, divided into 51.6% for rural Jharkhand and 23.8% for urban Jharkhand.[8] The National Commission for Enterprises in the Unorganized Sector (NCEUS) used the 2004-05 data, but changed the poverty line to Rs 20 per day. This increased the all-India poverty line to 77%. This figure wasn't disaggregated across States. The State-level disaggregation used the conventional poverty line and found that while the all-India poverty ratio for unorganized sector workers was 20.5%, it was 35.0% for Jharkhand.[9]

Figure 1.4: Poverty Rates in Selected States of Eastern India



Source: Planning Commission. Note: based on Uniform Reference Period

1.7 Income or expenditure represents only one dimension of poverty. NSS data are based on samples, not censuses. They also emerge with a time-lag and the large surveys are conducted at intervals of five years. The parallel exercise, which emerged during the Ninth Plan and was perfected in the course of the Tenth Plan, is more promising, since it is based on a decentralized identification. More specifically, for rural India this is based on 13 parameters like landholding, type of house, clothing, food security, sanitation, ownership of consumer durables, literacy,

[8] http://planningcommission.nic.in/reports/genrep/rep_pov.pdf.

[9] *Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector*, National Commission for Enterprises in the Unorganised Sector, 2007.

participation in the labour force, means of livelihood, status of children, type of indebtedness and reasons for migration, with a parallel set of parameters for urban India. This is applicable to Central government schemes, though States can evolve independent BPL identification criteria for State-level schemes. Few States have implemented such surveys for urban areas. However, this has been undertaken for rural areas, though implementation was temporarily postponed because of litigation before the Supreme Court. The Jharkhand survey was more like a census and gives a figure of 2.5 million BPL households for 2002-07 and 3.5 million BPL households for 2010. If the average size of a rural household is 6, this gives a rural BPL population of 21 million in Jharkhand. The rural population was 21 million in Jharkhand and is probably around 26 million now. This means that 80% of rural Jharkhand is BPL. Once one uses poverty indicators that go beyond income (or expenditure), one obtains a better handle on poverty issues. For instance, UNDP's recent Human Development Report (HDR) for 2010 uses a Multidimensional Poverty Index (MPI) that has been devised by the Oxford Poverty and Human Development Initiative (OPHDI) and uses variables that are based on access to education, health, electricity, sanitation, drinking water, cooking fuel and assets. This shows that 77% of Jharkhand's population is poor.[10] Since the Millennium Development Goals (MDGs) are also focused on human development and removal of human deprivation, a similar picture emerges from those too. For instance, there was a MDG country report for India in 2009.[11] The details differ depending on which MDG target and indicator one chooses. However, the broad picture is the following. Jharkhand won't achieve the target of halving the poverty ratio between 1990 and 2015. Though there are improvements in some indicators, and we will flag these later, by and large, this report categorizes Jharkhand as a slow achiever.

1.8 As a tangential but important point, per capita GSDP is often taken as an average measure of the level of prosperity of Jharkhand's citizens. In 2008-09, 25.12% of GSDP at constant prices originated from registered manufacturing and 8.26% from mining and quarrying.[12] But, in these two instances, the computational methodology is suspect. Stated differently, they include payments to capital that ought not to be a part of a State's domestic product and the domestic product is accordingly over-estimated. Once the over-estimation of capital is balanced against the under-estimation of labour payments, the short point is the following. Per capita GSDP over-estimates Jharkhand's prosperity and the situation is actually worse than what per capita GSDP figures suggest. This is in addition to the point that the distribution of growth, and the extent to which it is broad-based, is important.

[10] www.ophi.org.uk, since HDR doesn't carry the detailed figures for Indian States.

[11] *Millennium Development Goals – India Country Report 2009,* Central Statistical Organization, Ministry of Statistics and Programme Implementation, http://mospi.nic.in/rept%20_%20pubn/ftest.asp?rept_id=ssd04_2009&type=NSSO

[12] *Estimates of Gross/Net State Domestic Product and District Domestic Product of Jharkhand*, *ibid.*

1.9 Nor should one forget inter-district and intra-district variations in discussions on poverty and deprivation.[13] Table 1.1 gives some idea about inter-district variations. The precise development indicator doesn't matter. What is important is that Jharkhand's development cannot be about the development of districts like Ranchi and Dhanbad. It must also be about the development of districts like Garhwa, Palamu and Chatra. Equally importantly, Table 1.1 doesn't bring out intra-district variations. Development must also be about blocks like Chinia in Garhwa district, where the female literacy rate is 11.03%, the lowest among all blocks in Jharkhand.

[13] Latehar, Saraikela Kharsawan, Jamtara, Sahebganj, Khunti and Ramgarh became separate administrative districts later. Consequently, data are sometimes not yet available for these.

Table 1.1: Inter-District Variations

District	2002-07, number of BPL households[14]	Female literacy rate, 2001[15]	Infant mortality rate, 2001[16]
Deoghar	81,262	32.33%	57
Dumka	125,701	32.68%	47
Godda	117,719	27.98%	54
Jamtara	82,070		
Pakur	90,007	20.44%	56
Sahabgunj	125,342	26.78%	69
Bokaro	82,665	47.17%	37
Chatra	104,880	30.5%	60
Dhanbad	135,842	52.93%	27
Giridih	176,855	27.05%	56
Hazaribagh + Ramgarh	222,810	43.15%	46
Kodarma	51,282	34.03%	46
Palamu	190,158	30.5%	75
Garhwa	107,215	22.91%	65
Latehar	53,417		
Simdaga	71,635		
Lohardaga	36,355	39.88%	59
Ranchi + Khunti	207,187	52.77%	45
Gumla	87,546	40.56%	60
East Singhbhum	117,918	57.95%	36
Sarikela	128,354		
West Singhbhum	152,560	34.81%	54

Source: estimates by Committee
Note: Data for the newer districts are not available and therefore only 22 districts are included here.

[14] http://jharkhand.nic.in/bpl_list.html
[15] http://www.educationforallinindia.com/page157.html
[16] *Population, Health and Social Development in Bihar, Jharkhand, Orissa and West Bengal*, Population Foundation of India, 2010.

Section 2.1: Ensuring Growth

2.1.1 What will it take to restore the growth momentum and achieve annual real rates of GSDP growth of 10%? At one level, per capita GSDP is nothing but the average productivity of Jharkhand's inhabitants.[17] To increase it, one needs to increase the efficiency with which Jharkhand's natural (minerals, land, forests, water) and human resources are used. World Economic Forum's Global Competitiveness Index (GCI) analyzes competitiveness on the basis of 12 pillars – (1) institutions; (2) infrastructure; (3) macroeconomic environment; (4) health and primary education; (5) higher education and training; (6) goods market efficiency; (7) labour market efficiency; (8) financial market development; (9) technological readiness; (10) market size; (11) business sophistication; and (12) innovation.[18] As one moves up the development ladder, successive pillars become increasingly important. While GCI is used for cross-country assessments, it is relevant for cross-State performance in India. Stated differently, at Jharkhand's present level of development, growth impulses will primarily come from public institutions (improving property rights of individuals and communities, reducing corruption, ensuring judicial independence, improving government efficiency, improving security), infrastructure (transport and energy) and health and primary education, though this should not be interpreted as a complete exclusion of the other pillars. In other words, apart from greater efficiency in use of natural and human resources, there is the matter of institutions.

2.1.2 This point about human resources needs to be underlined further. India has a young population, with declining dependency ratios and a demographic transition, variously referred to as a demographic dividend. Globally, there is a robust body of research about the positive correlation between per capita income growth and the relative size of the working population and there are several complicated forces at work.[19] There is the direct impact of a larger quantity of labour input. When dependency ratios decline, savings rates increase, leading to increases in investment rates and higher rates of income growth. If the decline in dependency ratios is at the lower end of the age spectrum as result of fertility declines, female work participation rates also increase. That too, increases income growth. For East Asia, several studies suggest that between 25 to 40% of the East Asian miracle was due to the demographic dividend alone. There is no automaticity about demographic transition leading to higher levels of income growth. That becomes a function of education and health outcomes and access to market-based opportunities, the latter dependent on availability of physical infrastructure too. However, the short point is

[17] Since per capita GSDP is GSDP divided by population (and not just the working-age population), per capita GSDP is more accurately the average productivity of Jharkhand's working-age population.
[18] http://gcr.weforum.org/gcr2010/
[19] There is a review of the theoretical and empirical literature in *World Economic Outlook, The Global Demographic Transition*, IMF, September 2004.

that Jharkhand is in a position to tap the demographic dividend too. And if human development outcomes can be improved, the potential increment to GSDP growth is of the order of 2%, if not more.

2.1.3 A few observations about the quality of Jharkhand's present human resources will substantiate the background against which one is seeking to bring about an improvement in labour productivity. The gap between Jharkhand and the all-India average has sometimes been called Jharkhand's development deficit.[20] India's child (under-5) mortality rate is 18.4 per thousand, while Jharkhand's is 26.1. India's maternal mortality rate is 254 per hundred thousand, while Jharkhand's is 312. 72.9% of India's births take place in institutions, while the figure for Jharkhand is 40.1%. India's literacy rate is 75.26%, while Jharkhand's is 67.30%. India's gross enrolment rate in higher education is 11%, while Jharkhand's is 7.5%. Most employment is in the unorganized sector,[21] both rural and urban. It is also necessary to remember that, even in the organized sector, there can be individual labour contracts that are informal. A National Commission for Enterprises in the Unorganized Sector (NCEUS) report is a good source of additional information about Jharkhand's labour resources.[22] 20% of male children and 27.4% of female children are out of school.[23] In the rural unorganized sector, the mean number of years of schooling is 3.9 years for males and 1.4 years for females.[24] 60% of employment and 22% of GSDP originates in the primary sector, underlining the low-productivity and subsistence-level nature of these activities. 87.6% of employment is in the unorganized sector and 94.0% of workers are unorganized.[25] For unorganized sector workers who are employed outside agriculture, poverty ratios are highest among casual labour, followed by those who are self-employed. This does not represent efficient use of human resources.

Table 2.1: District Performance vis-à-vis People's Development Index of Jharkhand

District	Early 2000s	Late 2000s
Purbi Singhbhum	**0.72**	**0.87**
Dhanbad	**0.76**	**0.79**
Bokaro	**0.63**	**0.7**

[20] Unless otherwise stated, figures in this paragraph are from State government sources.
[21] There are technical issues of defining the organized or formal sector, with the unorganized and informal sector obtained as a residual category. We are glossing over these, as they are irrelevant for present purposes. Distinctions can also be drawn between the organized and the formal sector. However, for our purposes, we are treating them synonymously.
[22] *Report on Conditions of Work and Promotion of Livelihoods in the Unorganized Sector*, NCEUS, August 2007.
[23] Unlike some other States, this is not primarily because of the existence of child labour. *Ibid.*
[24] Expectedly, the number of mean years of schooling is higher in urban than in rural areas and is highest in the urban organized sector (10.3 years for males and 9.2 years for females).
[25] As expected, unorganized shares are higher among women than men.

District	Early 2000s	Late 2000s
Hazaribag	0.56	0.69
Ranchi	0.59	0.68
Pashchimi Singhbhum	0.39	0.65
Lohardaga	0.45	0.63
Palamu	0.46	0.6
Garhwa	0.43	0.52
Kodarma	0.48	0.52
Deoghar	0.35	0.47
Dumka	0.32	0.46
Gumla	0.27	0.46
Chatra	0.32	0.43
Godda	0.27	0.4
Sahibganj	0.33	0.33
Giridih	0.34	0.31
Pakaur	0.32	0.29

Source: Estimates by Committee.

2.1.4 With such a strong dependence on agriculture, labour productivity cannot be delinked from productivity of land, or even forests and mines. We will discuss forests and mines later. For the moment, here is a quote from Jharkhand government's Department of Agriculture and Sugar Cane Development. "Agriculture is the main stay for the 80% of rural population of the state. Agriculture is their employment and primary income generating activity. The agricultural economy of the Jharkhand state is characterized by dependence on nature, low investment, low productivity, mono-cropping with paddy as the dominant crop, inadequate irrigation facilities and small and marginal holdings. The dependence of agriculture on the vagaries of the rain-god can be gauged from the fact that as much as 92% of the total cultivated area is un-irrigated."[26] Not only is productivity low, it varies considerably among districts. For example, it is extremely low in Gumla, but high in Koderma.[27] Citing figures for

[26] http://www.jharkhand.gov.in/New_Depts/agric/agri_fr.html

[27] District-level productivity estimates are available in Ramesh Chand, Sanjeev Garg and Lalmani Pandey, "Regional Variations in Agricultural Productivity: A District-Level Study", National Centre for Agricultural Economics and Policy Research, 2009. "Per hectare productivity across various districts show range of Rs. 13 to Rs. 63 thousand, represented by Gumla at the bottom and Koderma at the top. There was a big difference in

2003, the afore-mentioned NCEUS report cites an average monthly income per farmer household of Rs 852, compared to Rs 2822 in Punjab.[28] For marginal holdings, this drops to Rs 555. While productivity is a function of farm size, marginal farmer households in Assam obtain an average monthly income of Rs 1083. The rural sector isn't only about farmers, but agricultural labour too. Though data are dated and are for 1990-2000, NCEUS reported an average daily earning of Rs 83 for Jharkhand, compared to Rs 116 in Punjab. The distance from better-performing States is thus more for farmers than for rural labour. However, the inefficient use of land is obvious enough.

2.1.5 Productivity improvements are contingent on better infrastructure. The gap between Jharkhand and the all-India average is considerable for physical infrastructure. The road length for ten thousand population is 25.6 km for India, while it is 12.3 for Jharkhand.[29] 45% of India's villages have all-metal roads, while the figure is 25% for Jharkhand. 80% of Jharkhand's rural households have access to electricity, while the figure is 26% for Jharkhand. 78% of India's households have access to safe drinking water, while the figure is 42.7% for Jharkhand. 44.6% of India's households have toilets, while the figure is 22.6% for Jharkhand. It is a moot point whether toilets should be included in physical or social infrastructure. But that is neither here, nor there. The critical elements in physical infrastructure are roads, electricity and water, of the drinking and irrigation variety. If parts of Jharkhand are bypassed and marginalized on access to these, it shouldn't be surprising that large segments of the population will be bypassed and marginalized on access to growth opportunities as well. In 1994, the World Bank's World Development Report (WDR) had the theme of infrastructure for development.[30] Using cross-country estimates, this WDR found that a 1% increase in the stock of infrastructure is associated with a 1% increase in GDP. The Indian figures that float around are higher. For instance, the National Manufacturing Competitiveness Council formulated a National Strategy for Manufacturing, where it argued that adequate infrastructure can improve GDP growth by a factor of 1.5%, with 1% accounted for by the power sector alone.[31] The Twelfth Finance Commission grouped States into five categories, on the basis of an infrastructure index constructed by IDFC.[32] Goa, Maharashtra and Punjab were "high". Gujarat, Haryana, Kerala and Tamil Nadu were "high middle". Andhra Pradesh and Karnataka were "middle". Himachal Pradesh, Madhya Pradesh, Orissa, Uttar Pradesh, Uttarakhand and West Bengal were "lower middle". And Arunachal

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the productivity among four top districts namelu Giridih, Dhanbad, Bokaro and Koderma. Three districts in this state namely Gumla, Simdega and Saraikala have per hectare productivity below 19 thousand." These are annual figures in current prices (2003-04 and 2004-05).

[28] *Ibid.*

[29] Unless otherwise specified, the figures in this paragraph are from State government sources.

[30] *World Development Report 1994, Infrastructure for Development*, World Bank and Oxford University Press, 1994.

[31] *National Strategy for Manufacturing*, National Manufacturing Competitiveness Council, March 2006.

[32] *Report of the Twelfth Finance Commission (2005-2010)*, Ministry of Finance, November 2004.

Pradesh, Manipur, Meghalaya, Jharkhand, Mizoram, Nagaland, Assam, Chhattisgarh, Sikkim, Tripura, Jammu & Kashmir, Bihar and Rajasthan were "low".

2.1.6 Finally, there is the issue of efficient use of capital. Indicators like World Bank's "Doing Business" set of numbers are often cited, highlighting high procedural costs.[33] For instance, to start a business, 38 days are needed to complete the procedures in Ranchi, compared to 30 days in Mumbai. Dealing with construction permits takes 170 days in Ranchi, compared to 80 days in Hyderabad. Registering property takes 56 days in Ranchi, compared to 24 days in Jaipur. Enforcing a contract takes 985 days in Ranchi, compared to 705 days in Kochi. Closing a business takes 8.5 years in Ranchi, compared to 6.8 years in Ahmedabad. However, one shouldn't form the impression that compliance costs are only about large corporatized business alone. In 2000, the Prime Minister's Council on Trade and Industry also submitted a report on administrative and legal simplifications.[34] This listed the following as industry concerns. "Large number of clearances/permissions required; Complex regulation governing day to day functioning; Multiple agencies regulating operations functioning independently; Lack of co-ordination between various governing agencies; Frequent changes in policies/procedures/tariff structures; Unpredictability of changes; Lack of clarity on issues between Centre and States; Transaction oriented approach of the system instead of a corporate approach, leading to increased costs and delays; Lack of openness and transparency in communication and providing information." Such issues affect small business too, and often, proportionately much more. The Fifth Economic Census of 2005 showed that there were 491,372 enterprises in Jharkhand.[35] 60.02% were in rural areas and 47.79% were own account enterprises, that is, those that had no hired workers. 97.32% of these were non-agricultural enterprises, underlying their presence even in rural areas. When compliance costs are reduced, they need to be brought down for these as well. Why are only 48,328 enterprises registered? Since incentives are conditional on registration, non-registration underlines high compliance costs.

Table 2.2: Investment in Jharkhand in 2007-08

States	Number Of Factories	Gross Capital Formation
	(Numbers)	(Rs. Lakh)
Bihar	1,783	43,930
Chattisgarh	1,854	652,170
Jharkhand	1,615	484,328

[33] http://www.doingbusiness.org/data/exploretopics. These numbers are based on surveys and perceptions and are therefore subjective. They are also for cities within States, rather than the State as a whole. Nevertheless, they do illustrate problems with compliance and procedural costs.
[34] This was chaired by Kumar Mangalam Birla.
[35] Figures from *Jharkhand: A Statistical Profile-2009*, Planning and Development Department.

States	Number Of Factories	Gross Capital Formation
Orissa	1,822	1,425,129
West Bengal	5,987	960,013

Source: Annual Survey of Industries

2.1.7 Many of Jharkhand's areas lack the connectivity that was talked about in the PURA (Provision of Urban Amenities in Rural Areas) concept – physical connectivity, electronic connectivity, knowledge connectivity and economic connectivity. With connectivity ensured, efficiency in use of inputs and higher growth is also ensured. Globally, a few developmental propositions are universal. First, economic development is correlated with urbanization, that is, urbanization may both be an outcome of, as well as facilitate, greater economic activity. Second, economic development is correlated with a reduced share of employment in agriculture and even forestry thereby reducing the downward pressure in incomes from these activities. At the same time, off-farm employment opportunities are created. Third, there is a switch from subsistence-level self-employment to more productive and higher wage employment. Fourth, informal/unorganized enterprises and employment transit to formal/organized and benefit from greater social security provisions. Fifth, there is an increase in female work participation rates.[36]

2.1.8 If physical infrastructure can be improved, the potential increment to GSDP growth is also of the order of 2%, of which, more than 1% is on account of the power sector alone. If public delivery of services is improved, there is an additional increment of at least 1%. And if the legal system functions efficiently, there is an increment of more than 1%. Admittedly, these are back-of-the-envelope kind of numbers and lack any robustness in quantification. However, they are indicative and underline the slack in the system. The potential GSDP growth is more than 15% and is achievable. In broad terms, regardless of the economic indicator used, the post-1991 lesson has been that backward States have begun to catch up, because of the slack that exists in the system. These transitions will occur as growth picks up. There is plenty of slack in the system. If human development outcomes can be improved, the potential increment to GSDP growth is of the order of 2%, if not more. And most important, greater incomes also translate into improved socio-economic status. This may occur by two routes. First, greater GSDP improves the demand for goods and services produced by the underprivileged. Second, greater GSDP enables the state to generate greater tax revenues for expenditure on welfare of the underprivileged sections.

[36] Indicus estimates show that the female work participation rate in Jharkhand is 27.5%, marginally higher than the all-India average of 27.3% and considerably higher than the figure of 22.7% for Bihar. However, the female work participation rate is 39.7% in Chhattisgarh. Of course, female work participation rates also depend on socio-cultural factors.

Section 2.2: The Peoples' Development Agenda

2.2.1 Growth or income are not ends, they are the means to an end. They are the means to providing prosperity and betterment of lives. How does one reduce poverty? How does one reduce deprivation? How does one ensure development? How does one increase employment? How does one ensure that development is inclusive? How does one improve human development outcomes? These are essentially the developmental concerns. Growth must be accompanied by targets and improvements in human development outcomes that can be monitored. For example, Table 2.3 illustrates the kind of improvements in human development outcomes that can be monitored, leading up to the year 2025. However, these are aggregate figures and have to be disaggregated at the level of districts.

Table 2.3: Human Development Targets till 2025

Indicator	2001	2015
Male literacy rate	67.3%	85%
Female literacy rate	38.9%	60%
Infant mortality rate	62	35
Maternal mortality rate (per 100,000)	371	135
% below poverty line	40.3%[37]	35%

Source: Registrar General of India and committee estimates

2.2.2 Development occurs both because of private initiatives and because of State intervention. There is a role for the government and there is a role for the private sector, the latter does not necessarily have to be interpreted as the private corporate sector and includes SMEs, micro enterprises, NGOs, not to mention individuals. Despite the possibilities of unbundling and delinking public provisioning from public financing, there are instances where there are market failures. Rural roads, electricity generation, rural schools, drinking water, irrigation water, primary health centers are cases in point. In addition to physical and social infrastructure, one expects the government to ensure law and order, a critical element in fostering an enabling environment. Not everyone can access market-based opportunities and that raises the question of subsidizing and targeting the poor. Though not a public good, this can be interpreted as a merit good. Paraphrased a bit, Jharkhand's

[37] 2004-05. The projections assume that the poverty line is unchanged.

untapped potential is largely linked to an inadequate and inefficient supply of public and merit goods. Since the 73rd and 74th Constitutional amendments, there has been an emphasis on decentralized planning, with planning aggregated upwards and made participatory. While this is a fair point and processes, priorities, resources and interventions need to have local variations, the basic template of development remains unchanged – better human development outcomes, better access to physical infrastructure and law and order. And economic growth enables these outcomes in a sustainable manner.

Table 2.4: District Level Human Development Targets

	Male Literacy	Male Literacy	Female Literacy	Female Literacy	Infant Mortality Rate	Infant Mortality Rate
State	2001	2025	2001	2025	2001	2025
Bokaro	76	96	46	87	37	12
Chatra	56	93	30	83	60	19
Deoghar	66	95	32	83	57	18
Dhanbad	80	97	52	88	27	9
Dumka	63	94	32	83	47	15
Garhwa	54	93	23	81	65	21
Giridih	62	94	27	82	56	18
Godda	58	94	27	82	54	17
Gumla	64	94	40	85	60	19
Hazaribag	72	96	43	86	46	15
Jharkhand	67	95	39	85	62	20
Kodarma	71	96	34	84	46	15
Lohardaga	67	95	40	85	59	19
Pakaur	40	91	21	81	56	18
Palamu	59	94	30	83	75	24
Pashchimi Singhbhum	66	95	34	84	54	17
Purbi Singhbhum	79	97	57	90	36	12
Ranchi	77	96	52	88	45	15
Sahibganj	48	92	27	82	69	22

Source: Estimates using data from Registrar General of India. Note: See Appendix

Section 2.3: The Inclusion Agenda

2.3.1 Though the expression inclusive growth has become a bit of a buzzword, it is somewhat misleading, because growth is not the same as development. In fact, what is meant is inclusive development, not inclusive growth. It is worth remembering that the Gini coefficient in the distribution of consumption expenditure is still low in Jharkhand. For 2004-05, it was 0.35 in urban Jharkhand and 0.22 in rural Jharkhand.[38] But there is a difference between perceptions of inequality and actual levels of inequality.[39] Had inequities in access to "inputs" been lower, resentment with respect to increases in inequality would tend to be lower.

2.3.2 Inequality can be thought of in many different ways. But the most basic ones is access to basic nutrition, education and health facilities as well as infrastructure for all. In that sense worrying about disparities in consumption expenditures will take away focus from the most critical issues – employment opportunities and productivity. In the same vein, the issue is not whether there should be greater focus on urban or rural areas. Quality services and infrastructure needs to be accessible wherever the resident of a state desires to reside. In that sense if urban areas are neglected it will impact the productivity and incomes of urban residents, just as absence of these amenities in rural areas impacts theirs. Having said that, there is enough evidence that within Jharkhand as well a momentum is building towards greater population concentration; towards urban areas; towards larger villages; and towards greater clustering. Responsive governments need to ensure that artificial barriers are not created that hinder this natural flow but help the residents in better utilizing their human capital wherever they decide to locate themselves. This assumes additional significance because of the almost certain increase in income inequalities the way they are conventionally measured when an economy goes through structural transformations in the course of a rapid growth process.[40]

2.3.3 The Census of 2001 showed that Jharkhand had 32,615 villages, of which, 29,354 were inhabited. The point is that several of these have population sizes less than 200 and this does not make the provision of physical or social infrastructure viable. For example, the financial inclusion agenda specifically targets villages that have populations of more than 2000. All development has a centre and a periphery.

[38] Indicus estimates. India does not collect data on the distribution of income. Since the data are on distribution of consumption expenditure, inequality in the distribution of incomes will be higher.

[39] This is a point made by Suresh Tendulkar in "Inequality and Equity during Rapid Growth Process", in Shankar Acharya and Rakesh Mohan edited, *India's Economy, Performance and Challenges, Essays in Honour of Montek Singh Ahluwalia*, Oxford University Press, 2010.

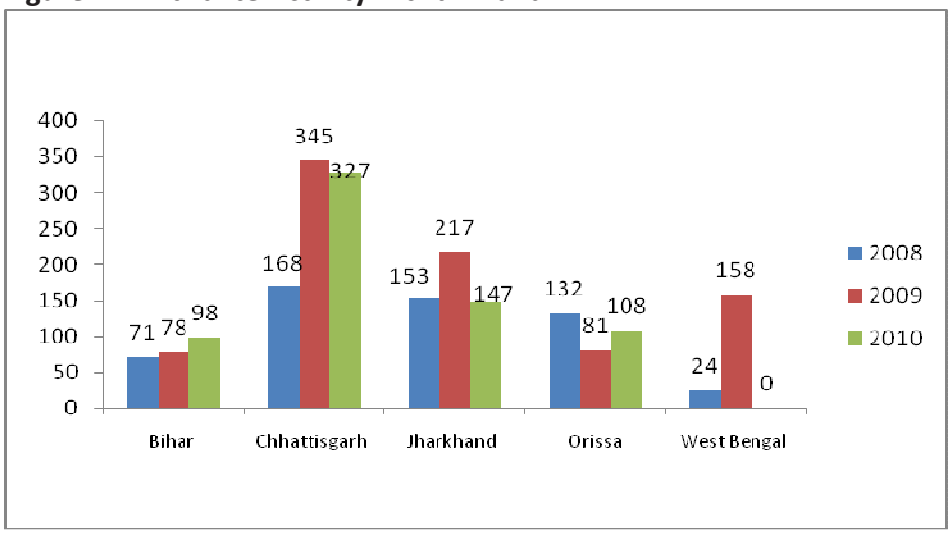
[40] Also see, Tendulkar, *ibid.* This has less to do with mechanical estimations of the Kuznets-Oshima U-shaped curve and more to do with the processes that Kuznets had underlined. These processes seem to be at work in post-1991 India and seemed to have increased in importance after the road revolution.

Inclusion should mean that the radius between the centre and the periphery increases and more and more parts of a State, or country, become mainstreamed.

Section 2.4: Abdication by the State

2.4.1 From the development deficit, we now turn to the trust deficit, and this has been no less important. "Naxalites are left-wing extremist groups waging a violent campaign for the landless labourers and tribal people against the so called tyranny of the landlords and chronic apathy, indifference and insensitivity of the state towards their genuine needs." This is a quote from the Jharkhand government's memorandum to the 13th Finance Commission.[41] There were 482 incidents of LWE (Left Wing Extremism) violence in 2007 and 157 casualties, with 32% of police stations affected.[42] Straddled as it is between Chhattisgarh, Orissa, Uttar Pradesh, West Bengal and Bihar, Jharkhand is caught in the centre of LWE violence and 18 out of 24 districts are affected in one form or another. The Ministry for Home Affairs now has a list of 33 districts in 8 States that are affected by LWE violence. For Jharkhand, this includes Bokaro, Chatra, Garhwa, Gumla, Hazaribagh, Latehar, Lohardaga, East Singhbhum, Palamu and West Singhbhum.

Figure 2.1: Naxalite Activity in Jharkhand



Source: South Asia Terrorism Portal;
http://www.satp.org/satporgtp/countries/india/maoist/data_sheets/fatalitiesnaxal.asp

2.4.2 Both Left Wing Extremism (LWE) and Naxalites are loose terms. Within the LWE umbrella, there are several different strands. There are several smaller groups, often based on caste alignments. Examples are TSPC (Tritiya Sammellan Prastuti

[41] *Memorandum to 13th Finance Commission*, Government of Jharkhand.
[42] *Annual Report 2007-08*, Ministry of Home Affairs, 2008. There are reporting problems with data, since data emerge from police stations and what is classified as LWE violence and what is classified as murder often depends on the whims and fancies of the police station concerned.

Committee), JPC (Jharkhand Prastuti Committee), JLT (Jharkhand Liberation Tigers), SJMM (Sangharsh Jan Mukti Morcha) and JJMP (Jharkhand Jan Mukti Parishad). It is not invariably the case that LWE groups[43] have roots in ideology. When the State abdicates its law and order function, there is often an element of pure extortion. To the extent there is an ideology, it is for the most part a mechanistic application of the taxonomy of imperialism, colonialism and feudalism and has never really evolved into something that is India-specific. The right questions to ask are the following. Would the Naxalite movement have taken root in the late-1960s had it not been for the general economic crisis and food crisis of the mid-1960s? Would it have had a support base now had it not been for the agricultural problem India has confronted since the late-1980s, compounded by problems of land, natural resources and forest rights? Would the LWE presence in Jharkhand have been as pervasive had it not been for the emotive content of the *Jal-Jangal-Jameen* slogan? Would the LWE presence in Jharkhand have been as pervasive had forest inspectors, excise inspectors and police not been seen as instruments of torture and oppression? These questions are the key, since the classic exploitation-by-the-landlord story does not exist in Jharkhand.

2.4.3 In 2008, the report of an Expert Group set up by the Planning Commission was submitted.[44] Among other things, this report mentioned the development deficit and governance deficits. First, there is a deprivation problem among SC-s/STs. Second, beyond socio-economic deprivation, there are issues of political marginalization. Third, SC-s in rural areas have suffered from human rights violations, crimes and atrocities. Fourth, ST populations have suffered from lack of access to traditional resources. Fifth, the judicial system doesn't deliver credible redressal and LWE fills the vacuum. As is obvious, there is both a law and order and a development issue. While these are valid points, it is also fair to argue that the general law and order machinery hasn't worked efficiently. Ensuring law and order is a core governance function and improving law and order and justice delivery is essential to improve the citizen's faith in the government. And law and order isn't just about LWE extremism. While one recognizes that LWE extremism finds fuel in lack of development, and this includes social sector issues, there is a chicken and egg kind of problem in the sense that the existence of LWE extremism also prevents social sector outcomes. The impression one forms is that LWE activists are less likely to prevent any social sector schemes proper. The resistance is to development work

[43] In the context of PRI elections, it is important to remember that some LWE groups have historically opted for elections, though these have always been a minority. There are non-violent strands within the Naxalite movement too, even if these are relatively insignificant. Boycotts, marches, road blocks and meetings are essentially non-violent and are often undertaken in pursuit of legitimate social and economic rights, including those that are for access to land and natural resources, or even minimum wages and caste-based discrimination.

44 *Development Challenges in Extremist Affected Areas*, Planning Commission, April 2008. The Expert Group was set up in 2006.

(especially infrastructure) that removes the poverty base and facilitates security apparatus. For example, contractors (roads) have security concerns. There are also arguments that LWE imposes levies and presumably, this jacks up costs. These levies are imposed for assorted economic activities and for road-construction contractors, are believed to be around 10%, with a higher rate of 10% for PMGSY and a lower rate of 5% for something like MGNREGS. There is also a problem with multiple levies imposed by rival groups, as opposed to single levies imposed by a single group, which only serves to jack up costs. However, in projecting this as a law and order cum development issue, one has to be careful. LWE does not project an alternative development agenda, as opposed to ensuring entitlements and rights that should in any event have been guaranteed and protected. Minimum wages, efficient dispute resolution and lack of access to natural resources are cases in point. In all of these, there has been an abdication by the State that needs to be rectified.

Section 3.1: Reinventing the Government – Augmenting Human Resources

3.1.1 Jharkhand Secretariat Services has sanctioned strength of 2341 officers. But only 842 (36%) are in position. There is an authorized strength of 110 IPS officers for Jharkhand. But only 102 are in position. Within the police system, district control rooms are non-functional because of lack of personnel. There are 54 vacancies in the district and subordinate courts and there are 7 vacancies out of the sanctioned strength of 20 in Jharkhand High Court. There are 13 government-run polytechnics in Ranchi, Dhanbad, Bokaro, Adityapur, Saraikela Kharswan, Gamharia, Latehar, Koderma and Dumka. These may have sanctioned staff of permanent lecturers, but function without them, on the basis of part-time lecturers. There are 133,500 posts for school teachers, but 13,500 posts are vacant. In community health centers, there are 341 specialists in place, as against a sanctioned strength of 776. 12% of PHCs are manned by non-medical staff. In running the ICDS, 51% of CDPO/ACDPO posts are vacant, while vacancies are 61% for supervisors, 9% for AWWs and 11% for AWHs. Jharkhand's road construction department has 3 chief engineers and 11 superintending engineers, while Bihar has 7 chief engineers and 28 superintending engineers. Jharkhand has 7 executive engineers, while Bihar has 21. There is a shortage of staff in banks, especially regional rural banks (RRBs). An average RRB branch in Jharkhand has 1.22 officers and 1.32 clerks. In land surveys, there is a shortage of "Ameens". There is shortage of staff in the agriculture department, including for extension work. The shortage of staff in ULBs ranges between 3.84% in Pakur and 63.88% in Gumla. There is a shortage of forest guards and foresters. These numbers are not meant to be exhaustive, but illustrative. That's also the reason why sources have not been given though they are from various state government departments though some of these are quite dated.

3.1.2 Delivering development requires government presence, and reforms do not mean abdication of a State's responsibility. Notwithstanding possibilities of outsourcing what have traditionally been regarded as government functions and hiring on contractual basis, human resources are required for delivering the core governance function. And it is fairly clear that there is a shortage of staff across all levels. Is this a shortage in sanctioned staff or a shortage in staff in position, despite vacancies existing? One does not form the impression that there is a great shortage in sanctioned staff. At best it is of the order of 10%. Some reports exist on reforming civil services in India. The Report of the Fifth Central Pay Commission is one example.[45] The 10-volume report of the Expenditure Reforms Commission (ERC) is another.[46] That apart, there was a Surendra Nath Committee Report in 2003 and a Committee on Civil Service Reforms in 2004. On an average, these suggest over-manning in the government system by a factor of around 10%. This may or may not apply to Jharkhand. However, the point is that even if there is a shortage in sanctioned staff by a factor of 10%, there should be enough slack in the system, including through possible increases in productivity, to neutralize this. Stated differently, the problem is more for filling vacant positions. While the precise figure varies from department to department, vacancies are of the order of between 30% and 50%. This is inordinately high. This assumes additional significance because there is a bunching together in government appointments and these are typically not spread out evenly over time. Because of this historical bunching together, there are imminent retirements and this will accentuate the human resource shortage across the board.

3.1.3 The appointments that are directly under the control of the State government are those that are undertaken through the Jharkhand Public Service Commission (JPSC) and the Jharkhand Staff Selection Commission (JSSC). There are several useful reports of the 2nd Central Administrative Reforms Commission (ARC).[47] Given the context, of particular interest are the 11th (e-governance), 12th (citizen centric administration) and 15th (State and district administration), especially the last. The 15th report talks about adopting the principle of subsidiarity in devolution of functions to local bodies, transferring functions/functionaries to PRIs, merging DRDAs with Zilla Parishads, creation of District Councils and District Planning Committees and discontinuation of para-statals and other committees. Specifically on State administration, there are recommendations on setting up of Lokayuktas and State Vigilance Commissions. A quote on civil service reform is useful. "The number of Secretariat Departments in the States should be further rationalized on the following basis: (i) The existing departments covering inter-related subjects, activities

[45] This was submitted in January 1997.
[46] The final report was submitted in 2000. Since this was about government expenditure, it also covered issues like food and fertilizer subsidies.
[47] http://arc.gov.in/

and functions should be merged; (ii) Need for synergy between the activities of various departments; (iii) Devolution of a large number of functions to the PRIs/ULBs; (iv) The role of Secretaries to be redefined; to be divested of non-essential responsibilities and executive work and larger delegation of power to the executive departments/agencies; and (v) Need for streamlining the decision making process." These are important issues and we will revert to them later. For the moment, it is enough to note that even in the absence of these transitions in the nature of governance and reinventing administration, neither JPSC nor JSSC has a list of posts required in each government department, nor a roster. Without these, appointments are completely ad hoc. In passing, there has been human capital flight at higher rungs of all-India services, such as IAS. Jharkhand needs this human capital. Therefore, there should be less flexibility in automatically granting permissions for Central government deputations and the 5-year rule should be strictly adhered to.

3.1.4 JPSC has been plagued by controversies and one needn't get into these. The point is whether these can be reduced. Part of the problem is inherent in the Bihar Civil Service (Executive Branch) and the Bihar Junior Civil Service (Recruitment Rules) of 1951. For instance, if the syllabus mandatorily specifies old languages, for which examiners are difficult to find, one builds inefficiency into the system. Nor is it obvious why a written test has to be of the subjective and "essay-type" variety. Multiple choice frameworks are used in several entrance examinations and these permit computerized evaluation. Spliced with coding of admission numbers, it will then be possible to outsource the written evaluation to the private sector and will also allow JPSC to go completely on-line, with only the *viva voce* administered by JPSC. It is necessary to flag an issue when the rules are revamped. The revised rules will presumably incorporate definitions of "domicile" and minimum qualifications in written examinations in accordance with the reservation policy (SC/ST/BC/extreme BC). But once these are stipulated, they should be rigidly adhered to, without any discretionary changes. The afore-mentioned controversies associated with JPSC have invariably resulted from discretion and its abuse. Transparency requires reduction in discretion. It is worth mentioning that the expected growth will result in creation of private sector employment opportunities, reducing the pressure on government jobs in the future.

3.1.5 A quote from the 15th report of the 2nd Administrative Reforms Commission is relevant.[48] "Currently a large chunk of employees in the State Government belong to Group 'C' (Class III) and Group 'D' (Class IV) categories. The Commission feels that the domain of the State Public Service Commission should be (a) recruitment of candidates for higher level posts (class I and Class II posts of various States Services) and (b) advising the government in senior level promotions through the

[48] http://arc.gov.in/15threport.pdf

Departmental Promotion Committee. The Commission should also handle recruitment / promotion to teaching posts in government Colleges and other fully funded units of the Universities. As regards recruitment of junior functionaries, the role of the State Public Service Commission would be to lay down the principles, norms and standards which need to be followed. The State Commission would act as a watch dog organization for public recruiting agencies like the Subordinate Service Commissions, Teachers Selection Commissions, District Recruitment Boards etc." This brings one to the role of the JSSC. While the JSSC Act was passed in 2008 and the Jharkhand Secretariat Service Rules have been announced in 2010, the principles of transparency that have been mentioned earlier for the JPSC have not yet been applied to the JSSC.

3.1.6 If there are vacancies of the order of 30 to 50%, it is tempting to attempt to fill them at one go, be it through the JPSC or the JSSC. This is not a good idea, given that there are supply-side issues that constrain the availability of good candidates in the state. Assuming a natural attrition rate of not more than 10%, it would be far better to target annual appointments of 20% and no more, adding 10% incrementally every year. This will avoid the bunching together of retirements in the future, which also has fiscal implications because of the bunching together of superannuation benefits. A pre-announcement of such hiring over the next few years would serve well for potential candidates to plan their preparation and educational attainments.

Section 3.2: Reinventing the Government – Incentivizing Human Resources

3.2.1 Jharkhand has 24 districts and 259 blocks. At a certain level, the district is increasingly becoming the focal point of development. There are issues connected with reinventing the role of the Deputy Commissioner (DC), who also performs a magisterial (District Magistrate) and revenue (Collector) function, in addition to the district development role. It is worth exploring whether, at this level, the development and regulatory (revenue/magisterial) functions can be separated, creating a District Development Officer (DDO) entrusted with developmental functions and the Collector/DM entrusted with regulatory functions.

3.2.2 So far as the government's development initiatives are concerned, the cutting edge is really at the block level, that is, with Block Development Officers (BDOs), though Sub-Divisional Officers (SDOs), Deputy Development Commissioners (DDCs) also exist at a higher level and so do District Planning Officers (DPOs). The vertical lines of control and reporting are not very clear and there are question marks about the role that SDOs/DDCs/DPOs play, with the possibility of eventually weeding out some of these intervening layers. For example, the role of the DDC is not clearly defined. But whether it is at these levels in the district or positions filled through JPSC and JSSC in

the State Secretariat, there is a problem with lack of vertical mobility, particularly for appointments that have been through the non-reserved category. The 77th Constitutional Amendment in 1995 inserted Article 16(4A), allowing reservations in promotions, as opposed to the entry level. The subsequent 85th Amendment in 2001 (with retrospective effect from 1995) also allowed this to affect consequential seniority. Specifically, Article 16(4A) states, "Nothing in this article shall prevent the State from making any provision for reservation in matters of promotion, with consequential seniority, to any class or classes of posts in the services under the State in favour of the Scheduled Castes and the Scheduled Tribes which, in the opinion of the State, are not adequately represented in the services under the State." There are sensitivities that need to be carefully handled. However, as Article 16(4A) clearly states, there is nothing automatic about reservations in promotions and consequential seniority. It is subject to the "opinion of the State" and inadequate representation of the category concerned. Its undiluted application has led to disenchantment among non-reserved public servants and this is particularly serious at the BDO level. A non-reserved category BDO stagnates at that level for anything between 8 and 12 years. In Bihar's restructuring of the administrative services, direct recruits are now directly appointed as SDOs. This may not be advisable, since block-level experience is desirable. However, on an average, a BDO should not be stuck in the same position for more than 4 years or thereabouts. While the administrative service has been specifically mentioned, similar promotional problems apply to the rural service and the revenue service too. To ensure morale, vertical mobility must be ensured and it might be a good idea to have clear rules about what percentage of vacancies will be filled through vacancies and what percentage through promotions. It is also worth asking the following question. Do promotions necessarily have to be referred to the JPSC or the JSSC? Surely, the process of obtaining vigilance clearances for purposes of promotion can be speeded up. For instance, if a vigilance clearance is not obtained within a year, the entire process has to start again.

3.2.3 Training is a problem across all spectrums of Jharkhand's public servants. Given manpower shortages, it is understandable it has been difficult to spare staff for training. As far as one can make out, the Shri Krishna Institute of Public Administration (SKIPA) organizes training programmes for entrants into the Jharkhand Administrative Service (JAS), IAS probationers, IFS (Indian Forest Service) probationers and some refresher courses for officers who have middle-level seniority.[49] Once the manpower shortages ease a bit, one would suggest a greater focus on refresher courses, including those for junior level staff. It is understood that a management development institute (MDI) has been proposed within the

[49] http://skipa.nic.in/trainings_held.htm

Jharkhand Civil Service Officers Institute.[50] Given the paucity of resources and their opportunity costs, it is not very obvious that this is a good idea, at least immediately. This isn't an area where market failure exists. There are several institutes, within the State and outside it, where such training activities can be carried out, without incurring capital expenditure. Training in institutes outside the State also has the added advantage of exposure to best practices in other States.

3.2.4 Several rules have been inherited from Bihar and continue to be applied automatically. Examples are the Bihar Service Code, the Bihar Rules of Executive Business, the Bihar Treasury Code and the Bihar Financial Rules. Rules on departmental enquires and secretariat procedures should also be flagged. Their mechanical application needs to be scrutinized. That statement is also partly incorrect. For instance, Rule 21(ka) of the Rules of Executive Business categorically states that no file should travel through more than two stages. But this rule is observed in the breach. In general, these inherited rules effectively centralize decisions inordinately, especially on matters connected to expenditure and transfers. This makes public servants risk-averse and this is compounded by the threat of anti-corruption and vigilance enquires. There have been several reports about corruption within the bureaucracy and it is necessary to take action against public servants and convey the point that such action will be taken. An ad hoc panel has been constituted to fast track departmental proceedings and following the Jharkhand Lokayukta Act of 2001, a Lokayukta has also been appointed. However, the Lokayukta's powers are limited and are advisory in nature. A Lokayukta only has powers to investigate, not to prosecute. Consequently, it may be a good idea to announce the setting up of a State Vigilance Commission. In Karnataka, the vigilance department has effectively been placed under the Lokayukta and the Lokayukta has also been granted *suo motu* powers. While it is understandable that one should insist on tenders for purchases exceeding Rs 50,000, why should there be this centralization of decision-making for minor tenders, purchases, minor repairs and expenditure and even appointments, transfers and personnel matters?

Table 3.1: Corruption Cases: A Comparison of Eastern States

States	Total Cases of corruption for investigation per Million population	Percentage Of corruption Cases Charge Sheeted To Total Cases Investigated
Bihar	2.7	44.2
Chhattisgarh	5.7	23.7
Jharkhand	4.1	26.6

[50] http://jharkhand.gov.in/new_depts/perad/perad_fr.html

States	Total Cases of corruption for investigation per Million population	Percentage Of corruption Cases Charge Sheeted To Total Cases Investigated
Orissa	22.8	25.1
Total (All-India)	87.9	31.8

Source: National Crime Record Bureau, 2009

3.2.5 A policy on infrequent transfers not only improves service delivery, it removes the scope for political patronage in transfers and rent-seeking through this process. Karnataka is the most cited example of this, with a quantitative cap on the annual number of transfers and public reporting of the number of transfers that have taken place.[51] However, States like Andhra Pradesh and Uttar Pradesh have also experimented with variants. For example, at various stages, transfers in UP have been vetted by the Service Establishment Board, then by the Chief Secretary, or even completely banned, unless vetted by the Chief Minister. Public reporting of the number of transfers is an inherently good idea and so is the announcement of a transfer policy, with a minimum tenure of 2-3 years. It is also a good idea to allow vetting by a Board, thus reducing political patronage. However, there needs to be some flexibility and deviations from the norm should be possible. Nor should it be the case that a transfer is interpreted as the public servant concerned being guilty of misconduct. Moreover, and this will work better for functionaries in the lower hierarchical levels, each functionary should give five preferences for his new location, and transfer should be to one of those. Only of there are no vacancies in those locations should the transfer be to a different location. Last, faster promotions should be considered for those willing to work in the more difficult or less popular locations.

3.2.6 As has been mentioned earlier, the centralization is particularly evident in the case of financial powers. These are unduly centralized, often at the level of the Cabinet. Budget sanctions and releases and approval procedures, even for continuing schemes, are inordinately time-consuming. More financial powers need to be delegated downwards, including for departments. Some financial management issues can only be addressed at the Central government level.[52] But despite this constraint, there is much that can be done at the level of State governments and this longish quote highlights the several elements that can fit into better financial

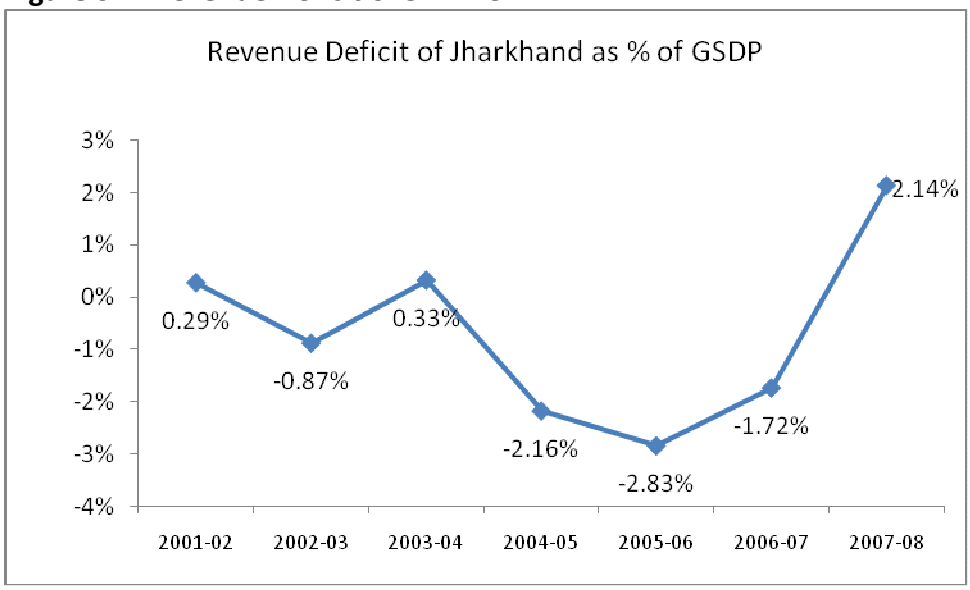
[51] See, Vikram Chand edited, *Public Service Delivery in India, Understanding the Reform Process*, Oxford University Press, 2010.

[52] See, Strengthening Financial Systems, 14th report of the Second Administrative Reforms Commission, April 2009, http://arc.gov.in/14threport.pdf

management. “The extent of delegation of financial powers to Departments varies from State to State. It has generally been observed that since this delegation is quite limited, most of the financial proposals get referred to the Finance Department. Some States have created the mechanism of Financial Advisers in some major Departments, but their powers are also rather inadequate. The same compulsion that made the Union Government implement the scheme of Integrated Financial Adviser for assisting administrative ministries in planning, programming and budgeting should now be the reason for State Governments to introduce the system of FA in various departments where FAs would be the representatives of the Finance Department. This should be coupled with greater delegation of financial powers to the Departments. Along with the introduction of the FA system, multi-year budgeting would help in bringing about better fiscal discipline and financial management. The present system of budgeting in the States for a year at a time suffers from a number of weaknesses. The most important is that full financial implications of projects, which are to be implemented over a number of years, are not brought out fully. A government decision may entail only a nominal expenditure in year one, but may call for sizable expenditure in the following years. …States like Karnataka have implemented the Medium Term Fiscal Plan (MTFP) since 2001-02, a rolling document prepared annually. The MTFP is a medium-term statement of the governments, medium-term fiscal objectives and also provides projection of key fiscal variables for the current year and three subsequent years. Each MTFP also reports performance against targets. That is the outlays need to be matched against outcomes. The MTFP serves two purposes. First, it helps to put annual budget formulation within the medium-term context. Second, it serves as a communication channel to the people, of government’s fiscal intentions and strategy. Many other states have followed this practice. This needs to be followed by all States. There is need to have economic assumptions which are prudent and realistic in order to formulate budget estimates which are accurate and not overly optimistic. At the end of every financial year, the gap between the estimates and the actuals should be analyzed so that the underlying economic assumptions could be suitably calibrated for the future…In States also, in spite of detailed instructions and guidelines in budget manuals, projects and schemes are announced on an ad-hoc basis during visits of high-level functionaries. Such announcements of large sums seriously distort plan allocations and disturb the faithful implementation of schemes already approved under the budget. This could also lead to announcements not being followed by formal approvals thereby resulting in discontent among people and financial indiscipline. The proper method would be to include projects that may be considered absolutely essential at the time of preparing the annual plans and budgets. The practice of announcing projects and schemes on an ad-hoc basis needs to be abandoned. A related practice is to make token provisions in the budget. This is resorted to facilitate announcement of a large number of projects. This can result in spreading limited resources thinly over a large number of projects and starvation of

projects already under execution. Cost and time over-runs are consequences of this practice. It is therefore necessary that norms for sanction of projects should be rigidly adhered to. As in the case of Union government, the expenditure pattern of the State Governments is also highly skewed with the bulk of expenditure taking place in the last quarter and particularly in the month of March. Government of India has tried to overcome this problem by introducing the Monthly Expenditure Plan (MEP). A similar system should be adopted by the States."[53] Moreover, the principle of universal coverage should be adopted for all new schemes and programs. Schemes/programs that are not large enough and inadequately funded to be able to cover only a small sub-set of the intended beneficiaries should be avoided. Instead each Ministry or department should be allocated a fixed amount annually for ad-hoc, temporary and very limited focus schemes.

Figure 3.1: Revenue Deficit over Time



Source: Reserve Bank of India, Central Statistical Organization

3.2.7 Not just Karnataka, but States like Andhra Pradesh, Chhattisgarh, Uttar Pradesh, Delhi and Madhya Pradesh have reformed and decentralized financial management. The delegation of powers by the Madhya Pradesh is a particularly good example to follow.[54] Through the CAG and Government of India, other templates also exist. If such reforms are undertaken, combined with others that are mentioned below, there is no reason why sanctions cannot be issued by 15th April of every financial year. Several rungs of the civil service have now been reduced to performing no more than clerical functions. They need to be empowered and higher rungs of the civil service freed for managerial functions.

[53] *Ibid.* Absence of internal audit wings is also an issue and the same report also mentions CAG's audit report for the year ending 31st March 2005, castigating Jharkhand's Rural Development Department for not possessing an internal audit wing.

[54] http://www.mp.gov.in/finance/index.htm

3.2.8 Quite often, ideas about how governance can be improved exist within the system. It is easier for insiders, rather than outsiders, to suggest innovations in public administration. Nor is it by any means the case that such ideas only exist at the top of the hierarchy. Therefore, it might be a good idea to actively solicit such ideas from within the system, including the lower rungs of the civil service. This will also provide a greater sense of participation. That can be reinforced by a system of evaluation of superiors by their subordinates, to complete the feedback loop. Similarly, regular civil society and functionary meetings need to be incorporated at the state, district and block levels to better apprise the government functionaries of situation in the field.

3.2.9 It is well known that many functionaries find it difficult to work in crime and LWE affected areas. This creates a vicious cycle of mis-governance, adversely impacting those who need to benefit the most from social sector initiatives. All functionaries across all departments should get (a) LWE area bonus (b) facilities for staying in the vicinity of the workplace. Some incentives already exist for police personnel, these need to be extended across all departments.

Section 3:3: Reinventing the Government – Prioritization of Resources

3.3.1 Reinventing the government also requires the prioritization of scarce resources, monetary and human. The Jharkhand Secretariat has 42 different departments, the list is shown below. If the focus is development, there is multiplicity and lack of coordination across these departments. All these departments need to be subjected to zero-based budgeting and streamlined, with mergers and consolidations. Uttar Pradesh, Karnataka, Andhra Pradesh, Chhattisgarh and Delhi have successfully undertaken such processes and have fewer departments now. On the face of it, there should be no reason for Jharkhand to have more than 20 departments. This ZBB exercise will also identify staff requirements and redeployment possibilities for surplus staff, especially in the Group C and Group D categories. It will also identify where staff can be hired on contractual basis. For instance, what is the case for segregating Welfare Department from Social Welfare Development, or Rural Development and Rural Works as separate Departments from Panchayati Raj? Can Agriculture and Allied Activities or Irrigation and Flood Control not be single consolidated departments?

1. Department of Agriculture & Sugarcane Development
2. Department of Animal Husbandry & Fisheries
3. Department of Art, Culture, Sports & Youth Affairs
4. Department of Building Construction
5. Department of Cabinet (Vigilance)

6. Department of Cabinet Secretariat & Coordination
7. Department of Co-operative
8. Department of Commercial Taxes
9. Department of Civil Aviation
10. Department of Disaster Management
11. Department of Drinking Water & Sanitation
12. Department of Energy
13. Department of Excise
14. Department of Finance
15. Department of Food, Public Distribution & Consumer Affairs
16. Department of Forests & Environment
17. Department of Health, Medical Education & Family Welfare
18. Department of Home
19. Department of Housing
20. Department of Human Resources Development
21. Department of Industries
22. Department of Information & Public Relations
23. Department of Information Technology
24. Department of Institutional Finance & Programme Implementation
25. Department of Labour, Employment & Training
26. Department of Law
27. Department of Mines & Geology
28. Department of Panchayati Raj & NREP (Special Division)
29. Department of Personnel, Administrative Reforms & Raj Bhasa
30. Department of Planning & Development
31. Department of Registration
32. Department of Revenue & Land Reforms
33. Department of Road Construction
34. Department of Rural Development
35. Department of Rural Works
36. Department of Science & Technology
37. Department of Social Welfare, Women & Child Development
38. Department of Tourism
39. Department of Transport
40. Department of Urban Development
41. Department of Welfare
42. Department of Water Resources

3.3.2 Though the political sensitivities have to be carefully handled, one forms the impression that the Department of Tribal Affairs, the Tribal Sub Plan (TSP) and the Special Component Plan (SCP) for Scheduled Castes need to be reoriented. Many schemes (schools, libraries, hostels, vocational training, health, village infrastructure, housing) are better addressed through line departments that handle these issues. This is already the case. However a better advocacy role needs to be played by the Department of Tribal Affairs. The Department of Tribal Affairs needs to concentrate

on and improve its abilities in overseeing, monitoring and advocacy responsibilities of the various arms of the government. It should also make public an annual Tribals Progress Report on the lines of the Human Development Report with quantitative indicators and district-wise performance.

3.3.3 The present practice seems to be one of counting "notional flow" as part of SCSP/TSP, on the basis of the share of these groups in the population.[55] This runs counter to the concept of SCSP/TSP. All departments should design projects that specifically benefit these target groups and only those should be included as part of SCSP/TSP. If TSP and SCSP funds are spent only when vetted by the State Planning Board, the Kerala experience shows that this actually leads to an effective increase in outlays. However, if this realignment is done, one must be careful that an impression is not conveyed that tribal interests are being sacrificed – rather they are being strengthened by creating advocacy centers within the government. There are also questions about the best mode of achieving a desirable outcome? Is it better to set up a school for STs in a backward area, with the attendant capital and recurring costs, or is it better to provide scholarships for ST students to study in general residential schools in more advanced areas?

3.3.4 There are 4,623 villages with a majority of SC populations and 10,000 villages with a majority of ST populations. If SCSP/TSP funds are concentrated, model villages can be constructed, with infrastructure (surfaced roads, drinking water, electricity, telephones, post offices, Internet access, banks, community halls, and houses), sanitation, drainage systems, watershed development, renewable energy systems, tree coverage and the creation of markets and employment-generation programmes. These model villages are along PURA lines. Table 3.2 shows what this means in concrete terms. Based on the planned expenditure in the 2009-10 budget, had SCSP/TSP funds been concentrated, instead of being notionally used, the second and the third tables of the column illustrate what would have been the actual disbursements, in accordance with SC/ST populations in the districts concentrated. As the table shows, the sums involved are not insignificant. A rough estimate to create such a model estimate is Rs 8 crores. Consequently, using the SCSP, 119 model villages can be developed throughout the State, without any additional funds. Similarly, using the TSP, 258 model villages can be created throughout the State. Needless to say, the creation of infrastructure will directly lead to employment generation in the local community, not to speak of indirect employment creation and multiplier benefits. It is therefore recommended that Jharkhand should start such a model village scheme.

[55] The Mid-Term Appraisal of the Eleventh Five Year Plan criticizes Jharkhand for not submitting SCSP and TSP documents along with the Annual Plan.

Table 3.2: Model Villages through SCSP/TSP funds

District	Disbursement through SCSP (crores)	Disbursement through TSP (crores)
Gumla	7.94	166.21
Pakur	6.81	92.78
Lohardaga	3.78	60.17
East Singhbhum	27.90	163.90
West Singhbhum	17.40	239.43
Saraikela	12.77	90.47
Ranchi	42.85	345.68
Dumka	19.86	147.06
Sahebgunj	17.78	80.37
Simdega	11.82	107.09
Godda	26.67	73.42
Jamtara	18.54	61.43
Deoghar	43.61	42.29
Giridih	73.78	54.70
Bokaro	70.28	64.80
Kodarma	21.28	1.26
Hazaribagh	101.6	79.74
Dhanbad	113.8	60.17
Latehar	33.01	75.32
Garhwa	73.50	47.12
Palamu	125.81	41.23
Chatra	75.11	9.04

Source: Documents from Jharkhand Government

3.3.5 The argument about zero-based budgeting also extends to schemes. Table 3.2 shows the number of schemes that presently exist.[56] At a rough count, there are 584 schemes. Not all of these are equally important, not even in terms of resources spent. But there are around 180 major ones and this is way too high. Given the developmental needs, the priorities are roads, electricity, water (irrigation and drinking), education and skills, health, efficient usage of land and forests, law and order and social safety nets. Any ZBB exercise of schemes should be done from within the government system, not from outside it. Having said this, anything that does not fit into these developmental priorities should be pruned. This is especially the case if central funding is not available for a scheme. Even if central funding is available, that does not necessarily justify a scheme's continuation. The extent of central funding varies between 100% and 25%, the point being that even if central funding is available, the State has to put in resources. The last two columns of Table 4 need an explanation. While the third column, lists Central schemes under which funding is available, the fourth column highlights a subset of these, identify Central

[56] No ready list was available and this list has been collated from the Annual Plans.

assistance that should provide the thrust to the area concerned. In addition, there are some Central schemes that should be given special focus, because financial assistance under these are demand driven. Examples are Swajaldhara, MGNREGS, the Total Sanitation Campaign, NHM, NRHM, SGRY, SJGSY, ICDS, SSA, PMGSY, RGGVY, EWS/LIG housing in urban areas, IAY, MDMS and RKVY.

Table 3.3: Number of schemes by department

Department	Number of schemes	Schemes where Central contributions are available	Central schemes that should provide the thrust
Agriculture	19	RKVY, Macro management mode, extension reforms, National Horticulture Mission, crop insurance, micro irrigation, NFSM, soil health and fertility management, infrastructure for seed production, weights & measures	NHM, RKVY, NFSM
Animal husbandry	20	RKVY, ASCAD, integrated sample survey, veterinary council, rinderpest	RKVY, ASCAD
Dairy	12	Fodder development, grassland development, biotechnology, RKVY	RKVY
Fisheries	9	RKVY, fish farmers, National Fisheries Development Board, fisheries training, group insurance	RKVY, NFDB
Art & Culture	30	National service, PYKKA	PYKKA
Cooperatives	19	ICDP, insurance, revival of cooperatives	ICDP
Civil aviation	2		
Commercial taxes	5		
Drinking water & sanitation	6	NRDWP, AUWSP, O&M, Total sanitation, Bharat Nirman	NRDWP, Bharat Nirman
Energy	11	RGGVY, APDRP	RGGVY, APDRP
Primary education	7	SSA, KGBV, SLMA, MDMS	SSA, MDMS
Secondary education	21	RMSA, computer literacy, model schools, hostels	RMSA
Higher education	10		

Department	Number of schemes	Schemes where Central contributions are available	Central schemes that should provide the thrust
Forestry & wildlife	23	Forest management, integrated development of wildlife, tiger reserve, biological park, CEPT	Forest management
Food, public distribution & consumer protection	11	AAY, PDS	AAY, PDS
Health & family welfare	32	NRHM, AYUSH	NRHM, AYUSH
Housing	7		
Home (jail+police)	21	Police modernization	Police modernization
Home guards	19		
Fire services	7		
Irrigation	6	AIBP, water bodies	AIBP, water bodies
Industries	27	Handlooms, SICDP, ASIDE	SICDP, ASIDE
Information technology	16	NeGP	NeGP
Institutional finance	5		
Labour, employment & training	25	Pensions, family benefits, bonded labour, AABY, RSBY, ITI-s	AABY, RSBY, ITI-s
Mines & geology	14		
Panchayati Raj	4	BRGF, RGSY, PMEYSA	BRGF, RGSY
Planning & Development	8	Civil registration	District planning
Information & public relations	16		
Personnel & administrative	1		

Department	Number of schemes	Schemes where Central contributions are available	Central schemes that should provide the thrust
reforms			
Rural works	4	PMGSY	PMGSY
Rural development	20	MGNREGS, SSY, SGSY, IAY, DPAP, IWDP	MGNREGS, SGSY, IAY
Revenue & land reform	9		
Roads & bridges	9	CRF, Inter-State connectivity	
Science & technology	12		
Social welfare	38	ICDS	ICDS
Surface transport	7	Railway projects	
Tourism	10		
Urban development	12	JNNURM, SJSRY, NRCP, NLCP, NUIS, ILCS	JNNURM
Welfare	50		

Source: State and Central government documents

Section 3.4: Reinventing the Government – Governance and E-Governance

3.4.1 The government needs to become much more citizen friendly. E-governance has become a buzzword and the government of Jharkhand already has a document titled "E-governance initiatives:"[57] The problem lies in the implementation. ICT is only a tool. Use of ICT doesn't improve governance unless there is an intention to improve governance in general. Rules under the RTI Act were announced in 2005, but they haven't been implemented effectively. As of now, the posts of Chief Information Commissioner and Information Commissioner are vacant. While this is temporary, PIOs (Public Information Officers) or Appellate Authorities have not been designated in every department. And when they have been so designated, the information is not

[57] http://jharkhand.gov.in/New_Depts/infor/infor_fr.html

readily available on-line. Nor is there a Citizen Charter for every department.[58] Within the State Secretariat, the quality of information available varies from department and department and this is also true of variation across districts. There is no universal and standard template. Both in the State Secretariat and at the level of the districts, telephone numbers and email addresses are generally not available for redressing complaints. At the risk of being unfair, the sense one gets is that the government isn't proactive enough in providing information, and this spills over into information that isn't always mandated under the RTI Act. For instance, why shouldn't there be voluntary disclosure of assets by Ministers, MLAs and the bureaucracy, without the RTI Act having to be invoked? Why isn't social audit of developmental expenditure enforced more? In passing, Madhya Pradesh has instructions for creating proactive disclosure documents.[59] In Bihar, there is a call-centre driven initiative on information, known as "Jaankari". This has been outsourced to BSNL and callers can make written requests, which are then converted into written ones by "Jaankari" staff, who also relay the request and take care of appellate requirements.

3.4.2 In 1997, there was a Conference of Chief Ministers on Effective and Responsive Administration. The Action Plan, emerging from the afore-mentioned Chief Minister's Conference, focused on three areas where administrative law reform was important – (a) making administration accountable and citizen friendly; (b) ensuring transparency and right to information; and (c) tackling corruption and motivating the civil services. There is also a Central government identification of departments where the citizen interface is the most. This Central government categorization mentions public grievances (electricity, water, telephone, ration cards, sanitation, public transport, police), rural services (land records, BPL cards), police (FIR registration, lost and found, missing persons), social services (pensions, land acquisition, rehabilitation and compensation, registration of licenses and certificates, ration cards, birth certificates, death certificates, domicile certificates, caste/tribe certificates, arms renewal, registration of documents, motor vehicle registration, driving licenses, school registration, university registration), public information (employment exchanges, examination results, railway, road and airline timetables, government notifications, government forms, government schemes, hospital/bed availability and services), agriculture (information about seeds, pesticides, fertilizers, crop diseases, weather forecasts, market prices), utilities (electricity, water, telephones), commercial (taxation and return filing) and government (electronic procurement). The intention behind this identification was to increasingly resort to

[58] "The study team visiting the state observed that except for banks, the Citizen's Charter was not displayed in any of the services. However the RTI display board, the board displaying the name of the Public Information Officer (PIO) and the compliant boxes were available in some of the services." *India Corruption Study – 2008, With Special Focus on BPL Households*, Centre for Media Studies and Transparency International.

[59] http://www.mp.gov.in/services/CreationOfRTI-Manuals-21102005.pdf

e-governance. Specifically for Jharkhand, we have some data on why BPL household interact with public agencies.[60] Within the basic category, 97% interact for PDS, 77% for hospitals, 37% for electricity, 53% for school education and 4% for water supply. Within the need-based category, 52% interact for banking, 47% for MGNGREGS, 20% for forests, 11% for land records and registration, 33% for housing and 2% for police.

3.4.3 In several instances, especially when certificates are needed, documentation is required and there is no uniformity across the documentation. To take but one example, at present, Jharkhand government provides online details for obtaining birth certificates, driving licenses, registering vehicles and obtaining death certificates.[61] There is no reason why information should not be available for every kind of certificate, with standardized information requirements. While UID numbers will make this easier, one need not wait for UID numbers to standardize the templates. Every such form should be available online and there should be no cost attached to the form (as opposed to an application fee). In other words, printed forms that are sold should not be mandatorily insisted on. Printed copies of online forms and their faxed and e-mailed versions should be acceptable. It is also possible to standardize all these forms, with a common set of information requirements across all forms.

3.4.4 There should be clear deadlines for delivering public services like issuing caste, birth, marriage and domicile certificates, copies of land records, ration cards and drinking water connections, with an accountability mechanism for non-delivery. It is worth mentioning the Madhya Pradesh Public Services Guarantee Act of 2010, which States like Delhi and Uttar Pradesh are also keen to follow now. At a Central government level, such a draft has been floating around since 2007. Jharkhand should consider the introduction of a Public Services Guarantee Bill, along the lines of what Madhya Pradesh has done. This guarantees public services within a stipulated time-frame, with appellate and penal provisions. One must be careful not to promise something that one cannot deliver on, because the backlash can be considerable. However, such a Bill will be a major signal and perhaps one can single out which public services will initially be under its purview. For example, immunization or MDMS may be easier than PDS.

3.4.5 One should flag the phenomenon of corruption and a quote is useful. “In order to avoid unnecessary delays and repeated visits in getting a work done in any of the government services, the citizens end up paying bribe….More than two-thirds of BPL households interacting with basic services perceived that there is corruption in PDS, Water Supply and Hospital services. In case of need-based services, more than three-fourths of the BPL households interacting with the services agree that there is corruption in Housing service, Police service and Land Records & Registration

[60] *India Corruption Study 2008, ibid.*
[61] http://jharkhand.gov.in/howdoi.html

services. These are the same three services for which interaction of BPL families in Jharkhand is significantly lower than other states, as noted earlier in this report.[62] The initiatives such as e-nibandh and e-nagrik seva or nagrik sewa Kendra are in existence. Due to the lack of both physical and technological access, the BPL households are unable to avail these services. This underscores the point regarding putting in place adequate administrative machinery on the ground for better service delivery…The study revealed that majority of the BPL households who had paid bribe paid it directly to the government officials. The figures reflect the impunity of government officials in services such as Hospital, School Education and Water Supply, where even middlemen are not involved. However, the latter is active in sectors such as PDS, Forest and NREGS. Recent reports of violence against NGO activists carrying out social audit for NREGS points to a strong nexus between government bureaucrats and middlemen. This needs to be dealt with immediately if the state is to achieve higher standards of service delivery."[63] In the findings of this study, corruption is very high in services like health, PDS, water supply, police and housing; high in school education and MGNREGS; and moderate in electricity, banking, land records and registration and forests. This identifies services that one needs to target for improvement.

3.4.6 E-governance has G2C and G2B dimensions, but one should not forget its G2B and G2E dimensions either. There is a fair body of literature on successful e-governance initiatives in India and one need not list all of them.[64] The ones that are commonly mentioned are the Bhoomi project in Karnataka (G2C), Gyandoot in Madhya Pradesh (G2C), Lokvani in Uttar Pradesh (G2C), FRIENDS in Kerala (G2C), e-Mitra in Rajasthan (G2C), SARTHI in Rajasthan (G2C) e-Seva in Andhra Pradesh (G2C, with some elements of G2B), e-Procurement in Andhra Pradesh (G2B), VICTORY in Bihar and e-Procurement in Gujarat (G2B). Jharkhand has begun the G2B process, but there are still significant gaps in G2C and there is much that can be learnt from these examples in other States. This gap is greater for G2G and G2E. In these, there are examples like Khajane in Karnataka, SmartGov in Andhra Pradesh and SPARK in Kerala. Treasury management has not yet been computerized, other than for salary functions. Overall e-governance comes in many hues and colors, and these initiatives should form the backbone of government for the people.

3.4.7 The potentially extremely useful "File Tracker" mechanism is hardly ever used and needs to become an integral part of the state government. For instance, the single-window system for industrial approvals is more or less dysfunctional. This can be put back on track with the adoption of the file tracker across all state government

[62] *India Corruption Study, 2008, With Special Focus on BPL Households,* Transparency International and Centre for Media Studies, 2008. A causal relationship is plausible, but not necessarily established.
[63] *India Corruption Report 2008, ibid.*
[64] See the 11th Report of the 2nd Administrative Reforms Commission, http://arc.gov.in/11threp/ARC_11thReport_Ch4.pdf

departments. Eliminating delayed decision-making will be one of the central themes of governance reforms, and this will best be enabled through a comprehensive and universal file tracker system.

Section 4: Law and Order

4.1 As the Bihar example illustrates, restoration of faith in the law and order machinery can become critical in conveying a message that change is imminent. In December 2007, 49,970 cases were pending in Jharkhand High Court, with 28,302 civil cases and 21,668 criminal cases. This figure seems to have increased to 55,000 subsequently. This ratio of civil to criminal cases needs some scrutiny, since these numbers are out of line with what tends to happen in other High Courts. In most other High Courts, around 70% of cases tend to be civil cases. Hence, there is a problem with the criminal case backlog in Jharkhand High Court and this has increased sharply in the last few years. On the same date, the pendency in Jharkhand's lower courts was 44,284 for civil cases and 228,034 for criminal cases. In most other Lower Courts, around 70% of cases tend to be criminal cases. While the higher number of criminal cases in Jharkhand's lower courts is understandable, the ratio is again on the higher side. There are 1464 criminal cases that are more than 10-years old. Though data are dated and go back to 2006, there are 12,188 under-trial prisoners.[65] Of these, 43 have been awaiting trial for more than 5 years and 409 between 3 and 5 years. The available capacity in jails is 9,817, but the inmate population is 17,658.

4.2 A detailed scrutiny of what has been happening, particularly on the criminal side, is necessary, through a dialogue with the judiciary. This needs to be among the priorities. While Fast Track Courts seem to have performed well in comparison with the newly-formed States of Chhattisgarh and Uttarakhand, what has been the problem with Lok Adalats and Family Courts? Why have Lok Adalats in Jharkhand High Court been largely restricted to motor accident claims, retirement benefits, compassionate appointment and land compensation? As in Haryana, can one experiment with mobile courts? How is one going to implement Nyaya Panchayats and Gram Nyayalayas? Under the Gram Nyayalaya Act of 2008, there should be Gram Nyayalayas in every intermediate-level Panchayat. But at the moment, they only exist in seven blocks - Mandar and Bundu (Ranchi), Ramgarh and Jarmundi (Dumka), Madhupur (Deoghar), Bahragora (East Singhbhum) and Jhumri Tilaya (Koderma). Can one introduce shift systems in courts? Gujarat has done that. Can the Women's Courts (*nari adalat*s) work better? How has ICT implementation been working in courts?

[65] The current figure on the number of under-trials is 11,524, http://www.jharkhand.gov.in/pms/about.html. But this does not give a break-up on how long these under-trials have been awaiting trial.

4.3 Crimes can be of the IPC or SLL (special and local laws) variety. In the absence of detailed data, the impression one forms is that Jharkhand's disposal record has been better for IPC crimes than SLL crimes. There are different types of SLL crimes and one suspect that most SLL crimes in Jharkhand concern the Forest Act and the Excise Act. There are certainly broader aspects of judicial reform. These include Central laws and issues of funding the judicial infrastructure. However, three points can be made. First, Jharkhand should appoint an Arrears Committee, to focus on what can be done to speed up dispute resolution, particularly for criminal cases. This shouldn't focus on what is known, such as funding and infrastructure requirements. Instead, it should undertake a case-flow kind of study and identify better case management, given the resource (financial and human) constraints that exist. Second, since the Forest Department is often perceived to be an agent of an alien State and an instrument of extortion and oppression, why shouldn't there be a separation of powers between the Forest Department's administrative and judicial functions? The present system is against principles of natural jurisprudence. Third, since the Excise Department also has a similar perception, how does one handle country liquor? One can understand the desire to transit from illegal country liquor to the legitimized variety, such as through providing licenses to vendors that include country liquor. The problem does not seem to be the licensing charges paid by vendors, but the excise duty. Non-payment of excise duty may be an argument used by inspectors when there are actual, or potential, prosecutions for informal commercial sales of country liquor. This doesn't hurt vendors, but people. The excise revenue through country liquor is marginal and should simply be abolished. Instead the licenses should be auctioned in an open and transparent manner. In passing, the Jharkhand Beverage Corporation is being set up to intermediate between wholesalers and stockists for IMFL. Why should this not apply to country liquor too? In the process, minimum quality norms might be imposed on country liquor. If one reforms criminal justice, the police and forest and excise departments, some faith in the government machinery should be restored. Though hard data are unavailable, we are given to understand that an inordinately large number of under-trials have been booked for very minor crimes. A comprehensive audit of such cases needs to be conducted and minor cases against individuals should be withdrawn. This will also release time resources of an overstretched justice system for the more important cases.

4.4 In general, across all States, the anti-LWE strategy has involved removal of shortcomings in intelligence gathering, co-ordination between States in anti-Naxal operations, modernization of State police[66], special attention to railway protecting

66 There is a Central Security Related Expenditure (SRE) scheme, where the Central government reimburses 50% of expenditure. For police modernization in Naxal-affected districts, the Central government funds 100%, provided the overall Central share doesn't exceed the ceiling of 60% or 75%.

railway property, improved physical and social infrastructure in affected districts, improvements in redressal of public grievances, encouragement of local resistance, spliced with awareness campaigns and peace dialogues with LWE groups. Some propositions are evident. Given the population, at 45,000, Jharkhand has too few policemen. Of the 45,000, because several are specialized police, often deployed in anti-LWE operations and in protecting the railways, not many are available for regular law and order functions. More policemen are needed. Table 4.1 shows how Jharkhand compares on this with other States.[67] The data are somewhat dated, but the conclusions will not change, even if more recent data were to be used. Only 20.82% of the sanctioned police strength is in position. The infrastructure needs to be improved, such as in police stations. More police stations need to be established. The police forces need training. All of these require resources and there are Centre-State issues here, including the extension of the SRE scheme to more districts.[68] However, one can't avoid the sense, notwithstanding the resource constraints mentioned above, that Jharkhand hasn't paid enough attention to the non-LWE function of the police.

Table 4.1: States Grouped on the Basis of Police Staffing

States	Civil Police personnel per case	Civil Police per 10000 of Populations	Civil Police per 100 Sq. Km. of Area	Category
Delhi	0.45	6.00	3154.08	High
Punjab	1.25	7.75	103.73	High
Haryana	0.61	9.82	89.14	High
Maharashtra	0.64	8.29	43.60	High
Himachal Pradesh	0.56	18.12	15.81	High
Uttar Pradesh	0.73	12.98	51.11	Medium
Tamil Nadu	0.34	7.70	62.97	Medium
Kerala	0.27	10.71	114.46	Medium
West Bengal	0.60	7.17	55.43	Medium
Gujarat	0.42	32.27	26.05	Medium
Karnataka	0.36	9.90	30.06	Medium
Orissa	0.45	13.53	18.64	Low
Bihar	0.35	8.33	75.74	Low
Assam	0.37	6.77	23.63	Low
Rajasthan	0.33	21.01	13.15	Low
Andhra Pradesh	0.26	9.29	26.06	Low
Jharkhand	0.21	14.20	34.34	Low
Madhya Pradesh	0.22	13.75	16.78	Low
Chhattisgarh	0.27	6.24	9.89	Low

Source: Corruption in Police Department, Transparency International & Centre for Media Studies, 2005

[67] *Corruption in Police Department*, Transparency International and Centre for Media Studies, 28 July 2005. Data are for January 2003. The UN has a recommendation of 60 civil police per 10,000 population, but no Indian State approaches remotely close.

[68] Dumka, Deoghar, Sahibganj, Godda, Jamtara and Pakur are examples.

4.5 Proposals for police reforms began surfacing when the government of United Provinces (Uttar Pradesh after Independence) appointed a Police Reorganization Committee on January 23, 1947. Even then, there were recommendations on corruption, misuse of authority, brutality, non-registration of First Information Report (FIR), poor investigation and fabrication of evidence. However, a serious discourse on police reform began in the 1960s, when several States appointed Police Commissions. Bihar was one of the first, with a Commission set up in 1958, reporting in 1961. While the terms of reference varied across States, they all focused on the need to examine the adequacy of strength, equipment and other resources of the police; recruitment, training and disciplinary standards; the working of rural police; separation of investigation and law and order functions; powers and duties of the police; maintenance of records; morale and efficiency; corruption and measures to deal with it; and police community relations. A Gore Committee on police training was set up in 1971. Subsequently, the National Police Commission (NPC) was appointed in 1977 and eight reports were produced between 1979 and 1981. To this can be added initiatives emanating from the National Human Rights Commission (NHRC). The report of the Vohra Committee was submitted in 1993. However, the history of police reform remained one of non-implementation of recommendations. In 1996, two former Director Generals of Police filed a petition in the Supreme Court, in effect questioning the non-implementation of the recommendations.[69] Consequently, the government set up the Ribeiro Committee on police reforms, which submitted two reports in 1998 and 1999. In 2000, the government set up yet another committee, known as the Padmanabhaiah Committee. In parallel, the Malimath Committee was appointed in 2000 and this too had recommendations on police investigations.[70] The details of the recommendations across these committees and commissions don't concern us here. Suffice to say that, as a result of the petition, in 2006, the Supreme Court issued binding directions to the Centre and State governments. In 2005, the government set up a committee known as the Police Act Drafting Committee (chaired by Soli Sorabjee) and a Model Police Act was drafted in October 2006.[71] Among other things, this would have replaced the outdated Police Act of 1861. Since law and order is a State subject, the implementation devolves on States. To the best of our understanding, the drafting of the legislation in Jharkhand is pending and has been pending for a long time. Several initiatives, such as the involvement of local communities in policing functions, are partly, though not entirely, contingent on this legislation. There are successful examples of police reform in other States, Rajasthan, Madhya Pradesh

[69] *Prakash Singh v. Union of India* (2006) 8 SCC 1.
[70] *Report of the Committee on Reforms of Criminal Justice System*, Ministry of Home Affairs, Government of India, March 2003, Vol. I, p.87.
[71] http://www.pucl.org/Topics/Police/2007/The%20Model%20Act,%202006%2030%20Oct.pdf.

and Kerala are three such. Incidentally, both Rajasthan and Kerala passed their new Police Acts in 2007. Therefore, there needs to be a clear deadline for presentation of the Jharkhand Police Act (Bill) to the Assembly. This can lead to the creation of an independent Police Commission. And independent of the Act, there should be a focused effort to improve the police-citizen interface. The present initiatives on the involvement of local communities in policing functions are too ad hoc and fragmentary. While LWE violence and financial constraints exist, they seem to have also become an excuse for non-reform. As a minor point, it is a good idea to have a clear announcement that there will be no CRPF camps in any government buildings, including schools, which are connected with development work. And for every CRPF camp, it might be a good idea to have a prominent sign that states that the camp is purely temporary.

4.6 The reform system, or jails as they are popularly called, needs to be improved dramatically. The first issue is the quality of the inmate reform and rehabilitation process, which is more or less absent. Instead jails have become merely instruments to punish. But quality cannot be separated from quantity. There are 26 jails in Jharkhand – 3 Central, 19 District and 4 sub-jails.[72] The total prison capacity is 11,186, but the present occupancy is 17,166, leading to crowding. The traditional approach in handling this problem has been through constructing new jails, such as in Hotwar (Ranchi), Ghaghidih (Jamshedpur), Deoghar and Latehar and sub-jails in Nagarutari, Ramgarh, Barhi, Hussainabad, Madhupur, Chandil, Bundu and Chakradharpur. As a rough approximation, the cost of constructing a completely modern jail with better facilities can be taken to be Rs 50 crores, including land acquisition costs of about Rs 1 crore. Punjab has experimented with the idea of selling land in the possession of existing jails (Patiala and Jalandhar) and using these proceeds to construct new better quality jails (Nabha and Kapurthala). This is an idea worth exploring. With huge increases in land rates, sale of land in existing jails in prime areas should generate enough resources to build new and modern jail complexes in peripheral areas. There should be enough of a surplus to build judicial buildings, with residential provisions, there too, making it easier to produce prisoners. While all the present jails are either equipped with video-conferencing facilities, or provisions are being made for these, physical proximity is far superior to video-conferencing. To underscore the point, jails are typically among the lowest items in state priorities. However, if the LWE have to be mainstreamed, jails will need to be improved both in terms of quality and quantity.

[72] http://www.jharkhand.gov.in/pms/about.html

Section 5.1: The Social Sector – Introductory Comments

5.1.1 There are some preliminary points that need to be made about social sector expenditure. First, while one recognizes that LWE extremism finds fuel in lack of development, and this includes social sector issues, there is a chicken and egg kind of problem in the sense that the existence of LWE extremism also prevents social sector outcomes. For example, specific assistance is available from the Centre for some LWE districts, such as in the case of Indira Awaas Yojana (IAY), (PMGSY), telecom and power (RGGVY) connectivity and MGNREGS. While it has been proposed that government employees be given additional incentives for working and posting in LWE areas, this has not been operationalized. When Central resources are available, States haven't always been able to provide matching (25%) grants. Even when resources are available, they haven't been utilized. The impression one forms is that LWE activists do not prevent any social sector schemes proper. The resistance is to development work (especially infrastructure) that removes the poverty base and facilitates security apparatus. Even if there is some obstruction created for government agencies, NGOs are not obstructed.

Table 5.1: District Development Index (Socio-economy Index)

District	Early 2000s	Late 2000s
Bokaro	0.64	0.8
Chatra	0.43	0.59
Deoghar	0.36	0.57
Dhanbad	0.64	0.77
Dumka	0.36	0.57
Garhwa	0.58	0.71
Giridih	0.46	0.46
Godda	0.18	0.36
Gumla	0.5	0.78
Hazaribag	0.7	0.92
Kodarma	0.6	0.63
Lohardaga	0.69	0.96
Pakaur	0.39	0.27
Palamu	0.61	0.87
Pashchimi Singhbhum	0.39	0.83
Purbi Singhbhum	0.74	1.05
Ranchi	0.69	0.87
Sahibganj	0.29	0.39

Source: Estimates by Committee. Note: See Appendix

5.1.2 Second, it needs to be recognized that there have been improvements in social sector outcomes. For example, despite complaints about quality of schools and quality of teaching, use of para-teachers and high drop-out rates, the fact remains

that schools have now been built under Sarva Shiksha Abhiyan (SSA) and gross enrollment rates have increased, particularly at the primary level. The number of out-of-school children has declined and demand for school education has increased. This is true of SC/ST populations as well. There have been drops in infant and maternal mortality[73] and the immunization record has also improved, as has the provision of Vitamin A and iron supplements.

5.1.3 Third, notwithstanding these positive developments, there are question marks about the efficiency of public expenditure. For example, in 2009-10, the education department spent 92.58% of its allocations, but the health department spent only 66.20%. The mid-term appraisal of the Eleventh Plan says that expenditure under SSA has been "sluggish" in Jharkhand, with "higher proportion of spill-over civil works".[74] There were "low attendance rates" for MDMS. In MGNREGS, the Planning Commission reports that in 2008-09, the average number of days of work provided for households who did obtain work was 48. 1.6 million households were provided work. Given the identified BPL population, this is an extremely low figure. A quote from a World Bank study also pinpoints inefficiencies in public expenditure. "Weak institutions translate into poor service delivery and client dissatisfaction….The primary health sector appears to be very precarious with high level of doctors' absence in the Primary Health Centre (PHC)…The reasons for poor client satisfaction are many: distance, absenteeism, attitude, inadequate provisioning for maintenance, and low local-level participation…On a single day, only 50 percent of primary schools and a shocking 27.8% of upper primary schools had all the teachers present…With the exception of PDS, no program covers more than 10% of all rural households."[75]

5.1.4 The UID exercise will not necessarily improve service delivery or reduce corruption. That is a function of how the UID numbers are used. However UID, or to use the brand name of "Aadhaar", eliminates multiplicity and thereby reduces some leakage. The same individual cannot possibly have two UID numbers. Aadhaar numbers are being rolled out in different stages in different States. At the moment, they are being started in Ranchi, Lohardaga, Dhanbad, Hazaribag and Deoghar, for MGNREGS and BPL card-holders. The structure of Aadhaar is demand-driven, through demand created by registrars. These registrars (banks, mobile providers) will be such that they are likely to generate Aadhaar numbers initially for those who are already included. Since Aadhaar will enhance the efficiency of public expenditure programmes, Jharkhand government should consider whether it is worthwhile offering a fiscal incentive (of say Rs 100) for BPL card-holders or MGNREGS beneficiaries to get registered in Aadhaar.

[73] However, institutional deliveries are still low.
[74] In fairness, Bihar, Chhattisgarh, Rajasthan and West Bengal are also mentioned in the same breath, *Mid-Term Appraisal of the Eleventh Five Year Plan*, Planning Commission, 2010.
[75] *Jharkhand, Addressing the Challenges of Inclusive Development*, World Bank, India Country Management Unit, 2007.

5.1.5 Second, one should consciously recognize that government financing need not necessarily be equated with government provisioning. This is regardless of the two broad flows of social sector schemes – those that flow to individuals (such as those who are BPL) and those that are collective and are routed through gram sabhas. Many States have experimented with public private partnerships (PPPs) in the social sector and PPPs should not be interpreted as those that apply only to physical infrastructure, or as those that apply to the private corporate sector. NGO delivery of schemes may also make it easier to handle the LWE concern.

5.1.6 Third, social sector initiatives now have to be spliced with PRIs/ULBs in mind. While there are expectations about PRIs and ULBs and decentralized planning, it should be remembered that PRIs/ULBs can have serious capacity constraints. We will talk about ULBs later. This is true of all three tiers of panchayats – village, block and district. PRIs will receive grants through the Union Finance Commission, fund flows for Centrally sponsored schemes and funds released through the recommendations of State Finance Commissions (SFCs). The SFC appointed earlier by Jharkhand government left out of its purview PRIs. Whether it is for the block (Panchayat Samiti) or district (Zilla Parishad), there are large capital costs too. For a completely modern Panchayat office, one is probably talking capital costs of Rs 1 crore for the first tier, Rs 5 crores for the second tier and Rs 50 crores for the third tier. For BRGF districts, these costs can be partly covered through BRGF. For non-BRGF districts, Centrally sponsored schemes like RGSY or PMSA/PYSA and even others provide for some amounts to be used for capacity building. However, this is unlikely to be enough. Therefore, it is suggested that one should explore the possibility of selling off land the government possesses and using these proceeds to build these complexes. This may not be feasible for the 1st tier, but it might be possible for the 2nd tier and should certainly be feasible for the 3rd tier. If this works for the 3rd tier, it will free up BRGF and CSS resources for the 2nd tier. There is also the issue of district planning. Planning Commission issued guidelines for district planning in August 2006 and a manual for the preparation of district plans has been released in January 2009. ILFS (Infrastructure Leasing and Financial Services) is usually perceived as the provider of physical infrastructure, especially for schemes like ASIDE (Assistance to States for Developing Export Infrastructure and Allied Activities) and the development of industrial parks or SEZs (special economic zones). However, ILFS has also been involved in broader PURA-type area development activities, such as in the districts of Jaipur and Rajsamand in Rajasthan and Dehradun in Uttarakhand. In view of the capacity constraints that will exist in Zilla Parishads in formulating district plans, it is recommended that Jharkhand government partners with ILFS or other similar organizations to work out district plans for a few districts on a pilot basis. At the *gram sabha* level, all the assorted committees that exist now will become subsets of something like a Village Development Committee. While on the BRGF, there have been suggestions that there has been corruption, especially when

construction has been undertaken by departments. As a general principle, construction should be through tenders. Incidentally, use of MLA local area funds seems to be haphazard, without any coherence or focus. Kerala has a system whereby 50% of such funds can only be used for designated expenditure. It is worth considering whether such an agreement can be arrived at, so that 50% of MLA (or even MP) funds can only be used for schemes that fit the district plan. The remaining 50% can continue to be discretionary.

Section 5.2: BPL, PDS, Annapurna, Antyodaya, ICDS, MDMS

5.2.1 All these social sector schemes have a food component, though they also include LPG gas and *chulha*s and kerosene. Not every such scheme receives Central funds. The final shape of the Food Security Bill is unknown. However, it should be obvious enough that the Central government's identification of the number of BPL households will fall short of the State government's numbers. There will also be Central government reform compulsions to phase out subsidies on LPG and PDS kerosene. It is a fair point to argue that Jharkhand should obtain the Special Category State status, so that a greater contribution is available from the Centre for PDS-type activities. The present identification is based more on geography and less on deprivation. Having said this, even with the Jharkhand Food Corporation, there will be capital costs in creating godowns and recurrent costs on subsidies in excess of those received from the Centre. It is therefore important that BPL identification is not in excess of the true number of the poor. While UID helps in reducing multiplicity, it does not automatically help in unambiguously identifying the poor. Since the Ninth Plan, the Planning Commission has advocated decentralized identification of the poor and for rural households, 13 parameters were evolved in the course of the Tenth Plan, with 7 parameters for urban areas. Between 2002 and 2007, Jharkhand government's BPL surveys in rural areas have been based on these parameters. However, they have not been participative. And understandably, they have not involved gram sabhas. That participative and decentralized identification is necessary, not only to ensure that all BPL households are included, but also that non-poor are not included. The participatory Kudumbashree model in Kerala suggests ways in which this can be done. Kudumbashree was a women-oriented and community-based poverty reduction programme that transcended identification of the poor. However, it also involved self-determination of the poor through a transparent risk index that was based on quality of the house, access to safe drinking water, access to sanitation, the number of illiterate adults, single income households, the number of individuals obtaining two meals a day or less, the number of under-5 children in the household, the number of cases of alcoholism/drug addiction and SC/ST status. Households with 4 out of the 9 characteristics were

classified as poor. The details will have to be modified to cater to Jharkhand's needs. But with gram sabhas in place, some such participative and decentralized identification is necessary.

Table 5.2: Nutritional Status

State	% of children with anemia	% of children under 3 who are stunted	% children under 3 who are underweight	% children under 3 who are wasted
Bihar	87.6	42.3	58.4	27.7
Chhattisgarh	81.0	45.4	52.1	17.9
Jharkhand	77.7	41.0	59.2	31.1
Orissa	74.2	38.3	44.0	13.5
West Bengal	69.4	33.0	43.5	19.0

Source: National Family Health Survey (NFHS-III), 2005-06

5.2.2 An unconditional cash transfer scheme is unlikely to be accepted in India. There have been recommendations about conditional cash transfers, such as food stamps. A recent paper by the Chief Economic Adviser also advocates this.[76] A food coupon-based system allows for choice, competition and efficiency. But globally, such experiments with conditional cash transfers have only worked when supply-side adjustments have taken place and the alternative choice exists. That's not true of the PDS or other food-based programmes in rural India. Therefore, one should seek to make them more efficient. There are lessons to be imbibed from Chhattisgarh. There can be transparency through e-governance and use of ICT infrastructure across warehouses of State Civil Supplies Corporation. The web-based application allows for automated allocation of ration to fair price shops (FPS) and on-line inventory management. Fair price shops are required to declare their stocks and sales every month and based on allocation, stock and sales figures, the software calculates the amount of commodities to be issued to a FPS. GPS technology is used to transport commodities from warehouses to shops. The GPS device tracks the location of the trucks and issues SMS alerts if a truck stops on the way for a longer time, or deviates from the designated path. Citizens are provided with a toll free number for registering complaints/grievances. Citizens can also register their e-mail or mobile numbers on the website and whenever PDS commodities are dispatched for a particular FPS, an e-mail or mobile alert is sent to all the registered e-mail ids or mobile numbers for that particular FPS. Computerization of the PDS system in

[76] *The Economics of Foodgrain Management in India*, Kaushik Basu, Department of Economic Affairs, Working Paper, September 2010.

Chhattisgarh has helped to check diversions/leakages in PDS commodities and has reduced delays in communicating allocation to a FPS. It has also reduced fake and duplicate ration cards by providing unique numbers and barcodes on computer-printed ration cards. Overall, it has lead to greater citizen participation and transparency. These are ideas that one should adopt. Simultaneously, Jharkhand has itself experimented with a novel idea that needs to be encouraged. This involves the issuance of new ration shop licenses to women's SHGs and doorstep delivery, to curb leakages in transportation, the main channel for diversion. However, this new system doesn't seem to be widespread and needs to be up-scaled. Nor are consumers given a choice to switch to these new SHG shops and away from old ration shops. This defeats the objective of choice and leads to disincentives. Since SHGs and PRIs now exist, there is no need for the district administration to directly deliver rice through beneficiaries, as is done under the Annapurna Yojana. While the idea of grain banks is a sound idea, it is also not obvious why they have to be run by the State government. For example, the World Food Programme (India) helps villagers, PRIs and SHGs of women help set up grain banks. The government should vacate areas where its presence is not strictly needed.

5.2.3 This is also true of schemes like MDMS. Centralized kitchens have been successfully and efficiently run by NGOs like Akshaya Patra Foundation and Naandi Foundation elsewhere in the country. They should be invited to Jharkhand. There is no reason why similar PPP principles should not be applied to the ICDS. While this may be difficult in remote and relatively inaccessible rural areas, there is no reason why one should begin in urban areas. Private schools are still limited in rural areas. Subject to budgetary considerations, it can be considered whether MDMS can be introduced in private schools too. If this can be done, Jharkhand will be the first State in the country to do so.

Section 5.3: Health

Box: Malaria

A guppy is a freshwater aquarium fish. Because it eats up mosquito larvae, it has been introduced in many countries in the world to control malaria, though it has sometimes also had a negative impact on native fish fauna. Jharkhand suffers from malaria and there has been resistance to DDT. When there is no danger to native fish, guppies can be introduced.

5.3.1 In the health sector too, there are several examples of PPPs. There is now a database known as HS-PROD (Health Sector Policy Reform Options Database) that documents such reforms.[77] There has been NGO management of PHCs, privatization of hospital services, PPPs for reproductive and child health-care, out-sourcing of testing and diagnostics, PRI involvement in constructing health-centres, NGO management of emergency transport services and vouchers for institutional delivery and immunization. In the course of formulating the 11th Five Year Plan (2007-2012), the Planning Commission constituted a Task Force on Public Private Partnerships (PPP) to improve health-care delivery.[78] Instead of the classic obsession with increasing public expenditure and assuming that public expenditure must be equated with public provisioning, this Task Force's report indicates how choice and competition can be introduced. This report begins by accepting the inevitable, instead of questioning it. The private sector provides 58% of hospitals, 29% of beds in hospitals and 81% of doctors. In rural areas, the private sector provides 78% of the treatment of illnesses, with a figure of 81% in urban areas. 77% OPD cases in rural India and 80% in urban India are serviced by the private sector. The use of the private sector is highest in a State like Bihar, the classic instance of a poor State. The use of public health care is lowest in Bihar and Uttar Pradesh, both poor States. The success of health care in States like Tamil Nadu and Kerala isn't due to the public sector alone. The private sector has had an important role to play. The private sector doesn't mean the corporate private sector alone. It also includes NGOs that are not always funded out of government budgets. Such NGOs have produced dramatic improvements in primary health care services at costs that range from Rs 21 to Rs 91 per capita. This doesn't negate the point about lack of regulation, since the quality of health care provided by the private sector is heterogeneous and of

77 *Health Sector Policy Reform Options Database of India (HS-PROD),* Ministry of Health and Family Welfare, 2007. Alternatively, www.hsprodindia.nic.in.

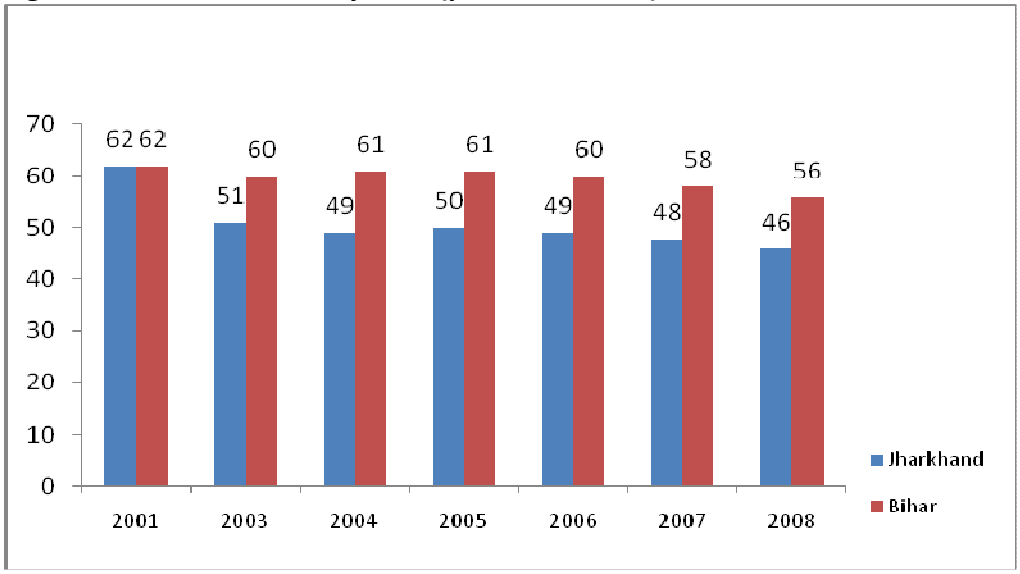
78 *Draft Report on Recommendation of Task Force on Public Private Partnership for the 11th Plan*, Planning Commission, Government of India, http://planningcommission.nic.in/plans/planrel/11thf.htm

variable quality. In general, private health care services are also more expensive than public ones, more so for in-patient services. One therefore needs to figure out how the poor can be subsidized. However, even if private health care is relatively more expensive, and perhaps even inequitable, it is more accessible, better managed and more efficient. There are several different forms of public private partnerships. Services can be contracted out on a temporary basis to the private sector. The government can pay an outside agency to manage a specific function. Government facilities can be rented out or leased to private entities. And government assets like public health facilities can even be sold to private groups. Finally, subsidies meant for the poor can be routed through private entities. And experiments also include levy of user fees and insurance schemes. There can be no universal template. But all these examples demonstrate that there are alternatives to the simplistic notion of increasing public expenditure and channeling it exclusively through public delivery. Some of these may be premature, especially for rural Jharkhand. But that's not really the point. One should begin to use such experiments where one can.

5.3.2 One example can be found in the Rogi Kalyan Samiti (RKS) of Madhya Pradesh, which also now extends to Chhattisgarh. "RKS is the hospital based management committee, registered as society under the Madhya Pradesh Societies Registration Act 1973. These are to be constituted in all the public hospitals, from Primary Health Centre through Community Health Centre and civil hospital till District hospital tier as facility based management bodies with the core remit of patient welfare, augmenting hospital facilities and services with the participation of local people….Anybody reaching the public health institution can be exempted from fees, if he or she, denies the ability to pay. The public health system shall operate on faith and trust and thereby reasonable efforts shall be made to establish the BPL status of the patient, in absence of which, self-certification will be the rule, rather than exception."[79]

[79] http://www.mp.gov.in/health/rks/rks-english.pdf

Figure 5.1: Infant Mortality Rate (per 1000 births) in Jharkhand and Bihar



Source: Sample Registration System, Various Years

5.3.3 There is a serious shortage of health care workers willing to work in rural areas. We have elsewhere addressed the problem of rewards for good performance. A better monitoring system, greater community involvement, as well as a difficult area bonus for those living and working in facilities that are in 'difficult areas'. These apply generically for all sectors where the state is in the business of service delivery, and these apply to basic health care as well.

Section 5.4: MGNREGS

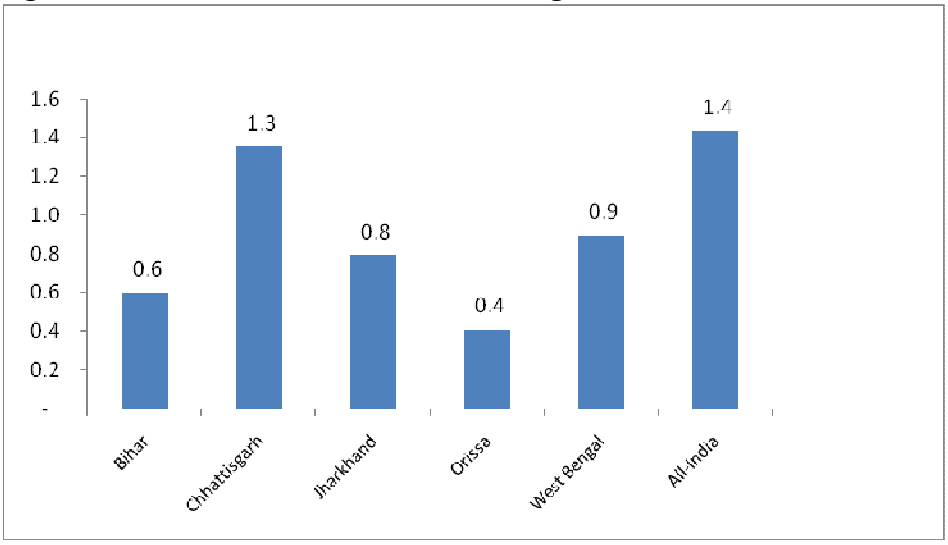
5.4.1 1.7 million households have been provided employment under MGNREGS in Jharkhand. The number of person-days of employment provided is 84.2 million. 160,813 projects have been taken up and 75,767 projects have been completed. Yet, MGNREGS does not seem to have had the impact it should have had in a poor State like Jharkhand. Part of the reason is that the works taken up have been completely ad hoc, without any bearing on local conditions. "The works undertaken through MGNREGA give priority to activities related to water harvesting, groundwater recharge, drought-proofing, as also the problem of floods. Its focus on eco-restoration and sustainable livelihoods implies that its success should spur private investment by farmers on their lands. This would lead over time to an increase in land productivity generating a natural demand for labour which would automatically reduce dependence on MGNREGA as a source of work. If it can strengthen Panchayati Raj as it is meant to, MGNREGA has profound significance for deepening democracy and governance reform, especially in the remote hinterlands

of India, where the democratic fabric has come under strain in recent years."[80] With PRIs in place, the choice of works will now be left to PRIs and it has also been suggested that there should be an Employment Guarantee Assistant in every village, attached to the 1st tier of the panchayat. 6% of the administrative costs now allowed can certainly be spent on such professional support at village and block levels.

5.4.2 There are several legitimate complaints about MGNREGS, as it stands. There are fake muster rolls. Job cards are held by middlemen. Payments are made for lower than the stipulated wages and for fewer days than have been worked. Since payments must mandatorily be made through banks and post offices, and financial inclusion will not cover all villages, inordinate distances have to be travelled. Workers are unable to travel to banks and banks or post offices say that cash is not available. Mandatory social audit by civil society, in collaboration with PRIs, will curb some of these malpractices. For example, the Andhra Pradesh Society for Social Audit (APSSA) experiment has been quite successful, as has been the Andhra Pradesh software that permits payments to be made to the bank or the post office within a week. An independent Ombudsman can also be appointed in every district to resolve MGNREGS-related complaints. But this doesn't completely solve the payment problem, not even through banking correspondents, the use of mobiles or sending of wages through money orders. Every block has 2 to 3 major *haat*s or markets that happen on prescribed days of the week. It is therefore suggested that bank/post office outlets should mandatorily be opened at these *haat*s, so that wage payments can be disbursed through these. The experiment of mandatorily requiring payments to be made into banks and post office accounts hasn't really worked and there is a demand for instant payments, which reportedly is being met by middlemen. What goes by the name of corruption by middlemen, workers being paid less than they should, is often not quite that. Because of the demand for instant payment, it is a facilitating service performed by these intermediaries, with the job card becoming a bit like a negotiable instrument. Rather than attempting to eliminate this practice, the objective should be to fill the need – that of instant or quick payment as close to the doorstep as is possible.

[80] *Mid-Term Appraisal of the Eleventh Five Year Plan.*

Figure 5.2: MGNREGA Effectiveness Ratings for Selected States



Source: NREGA Employment Outcome, 2009-10

5.4.3 Without taking away the right of PRIs to determine works, it is also worth considering whether a greater focus should be given to works allowed under MGNREGS. For example, construction of new check dams or water harvesting structures can run into problems of forest clearances or even extremist problems. This is less of an issue if MGNREGS is given a focus and is exclusively restricted to de-siltation of existing water bodies, at least for the initial years. This has positive externalities and restoring flow in stagnant water bodies also helps the cause of malaria eradication. De-siltation is also more labour intensive than fresh construction. Consequently, in line with MGNREGS objectives, the wage share in total expenditure is higher. Schedule 1 to the Act has a list of permissible works according to their priority. However, "renovation of traditional water bodies including desilting of tanks" is listed in this schedule and there is no conflict with MGNREGS intentions. In addition, it is recommended that satellite imagery be used, in collaboration with ISRO (Indian Space Research Organization) to check that the desiltation is indeed taking place.

5.4.4 Had rural India had high productivity and income levels, MGNREGS would not have been necessary. The problem with MGNREGS, as it stands, is that, because of the stipulated wages/non-wages ratio, it does not generally permit the creation of productive assets. While it will be difficult o build physical asstes given the structure of MGNREGA, human capital is another story. It is therefore suggested that Jharkhand government should try to tweak the MGNREGS, so that it leads to the creation of human capital. Resentment over land acquisitions for mining or industry are often a reflection of lack of skills. Had that not been the case, a new factory or a new mine would have employed local labour, since the transaction costs of hiring local labour are lower than the costs of getting labour from other States. Even otherwise, it is recognized that there is a skills deficit. What is therefore proposed is

something like the following. If a worker voluntarily opts out of the MGNREGS, he/she will be enrolled in a skill up-gradation programme. We will talk about education and skills in the next section. For the moment, assuming a worker works for 100 days a year in MGNREGS, the annual expenditure on the household is Rs 10,000.[81] For a 6-month skill up-gradation programme, this translates into a monthly stipend of Rs 1667, which will be paid only if the worker enrolls and regularly participates in the programme, successful completion should call for an additional reward. For this choice to be exercised, the skill up-gradation programme needs to be credible, leading to actual employment. Therefore, as will be discussed in the next section, the skills provider will have to have a tie-up with prospective employers and it might also be possible to obtain a matching stipend from the prospective employer.

Section 6: Urbanization Issues

6.1 Urbanization levels in Jharkhand are still low, 22.24% according to the 2001 Census. These are concentrated in 152 large, small and medium towns. However, with economic development, greater urbanization is inevitable, with attendant pressures. Indeed, at 2.9%, Jharkhand's annual rate of urbanization has been faster than its rate of population growth of 2.3%. Most of these urbanization pressures will be felt in the quadrangle of Ranchi, Bokaro, Dhanbad and Jamshedpur. In 2008, it is estimated that the urbanization rate is 25%, with 7.6 million people residing in urban areas. This is expected to go up to 31% by 2030, with 12 million people likely to reside in urban areas.[82] There is the attendant estimate that 61% of Jharkhand's GSDP will then come from urban areas. This makes it imperative for the State Government to look at the urban and semi-urban centres as engines of future growth and plan for them accordingly, so that they do not get burdened under unsustainable infrastructure and unplanned and chaotic growth.

[81] These are upper range figures, since the daily rate in Jharkhand is lower than Rs 100 and the number of days worked per year is also lower than 100. However, these are indicative.

[82] McKinsey Global Institute, *India's urban awakening: Building inclusive cities, sustaining economic growth*, McKinsey & Company, 2010.

Table 6.1: Urban Population in Jharkhand Districts in 2001

Districts	Population (No.)
Bokaro	804,657
Chatra	42,020
Deoghar	159,851
Dhanbad	1,255,358
Dumka	114,912
Garhwa	42,639
Giridih	122,364
Godda	37,008
Gumla	73,742
Hazaribag	529,069
Kodarma	86,749
Lohardaga	46,196
Pakaur	36,029
Palamu	125,093
Pashchimi Singhbhum	350,898
Purbi Singhbhum	1,091,204
Ranchi	977,821
Sahibganj	98,131

Source: Census of India, 2001

6.2 What are the cities one needs to focus on? The four principal cities of Ranchi, Bokaro, Dhanbad and Jamshedpur have already been mentioned. Of these, populations in 2001 were a little short of 1 million for Ranchi and a little over 500,000 for Jamshedpur, with Bokaro and Dhanbad in the 200,000 range. All three are Tier-3 cities, basing themselves on manufacturing and mining, though Ranchi is also the administrative headquarter. But all four are about to break into the Tier-2 category. Hazaribagh, Mango, Adityapur, Giridih, Deoghar and Chas come next, in the 100,000 to 200,000 range. However, urbanization will occur not only in these 8, but also in urban centres like Jugsalai, Chakradharpur, Simdega, Chatra, Lohardaga, Chaibasa, Jhumritilaiya, Katras, Dumka, Sahebganj, Pakur, Sindri, Jharia, Phusro, Madhupur, Godda, Daltonganj and Garhwa.

6.3 Ever since the Zakaria Committee in 1963, physical norms have been suggested for basic urban services like water supply (piped and potable), sanitation/sewerage, solid waste collection and disposal, storm water drains, housing, urban roads and public transport, street-lighting and water for industrial and commercial use.[83] There have also been attempts to convert these into monetary estimates of cost of delivery, though these vary, depending on the type of urban centre. These do not concern us here, except to note that the monetary costs are considerable and

[83] See, "Norms and Standards of Municipal Basic Services in India", M.P. Mathur, Rajesh Chandra, Satpal Singh and Basudha Chattopadhyaya, National Institute of Urban Affairs, Working Paper, April 2007, http://www.niua.org/Publications/working_papers/N&S%20working%20paper.pdf

Jharkhand's urban centres fall short on the physical norms. The costs will be large despite economies of scale in service delivery and possibilities of self-generation of funds.

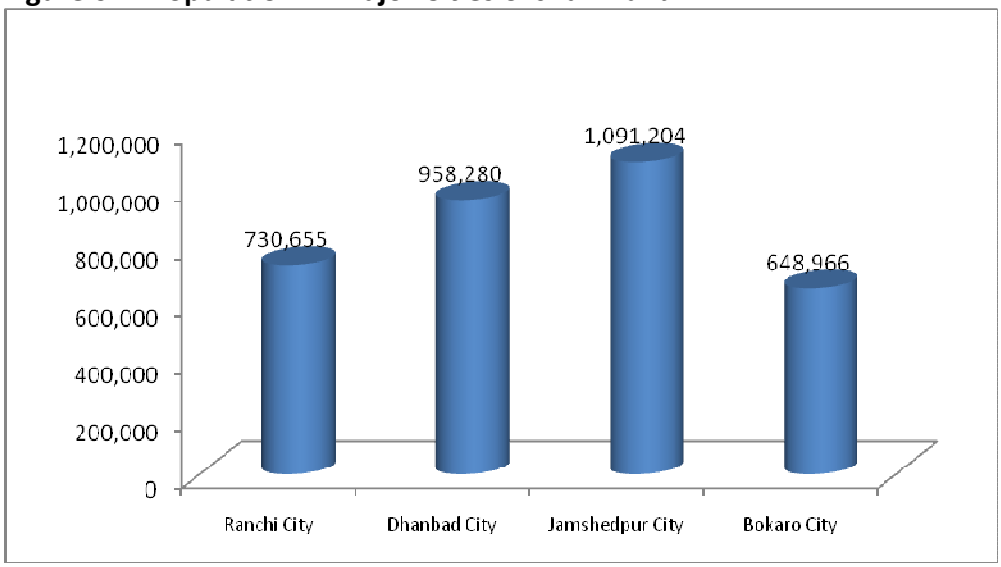
6.4 Part of the present problem is in the lack of urban local bodies (ULBs) and lack of devolution of powers to them. After the 74th Constitutional amendment, most of the urban services mentioned above become the responsibility of urban bodies. The Report of the First State Finance Commission only covered ULBs, since PRI elections had not been held then.[84] It mentioned functional ULBs in 43 towns, with a Municipal Corporation in Ranchi, 20 Municipalities and 22 Notified Area Committees. The Planning and Development Department cites a slightly different figure of 37 ULBs.[85] Be that as it may, it also states that 152 urban centres will have to be declared as ULBs/Notified Area Committees/Nagar Panchayats/Municipal Councils. There are some minor points that need to be flagged. First, there is often a multiplicity of ULBs, Jamshedpur and Dhanbad are examples. Second, governance is also about enforcing laws, rules and regulations. Planning for any urban area requires at least a 20-year vision. However, master-plans serve no purpose if they are readily deviated from and there is no culpability. The masterplans need to be public and any deviations require state level permissions. Third, ULB staff are not built for the requirements and need to go through an intensive training program, an example being in double account book-keeping.

6.5 The problems with the present system are known. Ranchi is governed by the Ranchi Municipal Corporation Act of 1959. Other ULBs are governed by the Bihar Municipal Act of 1922. While both pieces of legislation are similar, both circumscribe the powers of ULBs to raise resources. The Jharkhand Municipal Bill has been pending and should be passed swiftly. It will permit ULBs to raise revenue through taxes (property tax, tax on vacant land, surcharge on transfer of lands and buildings, tax on deficit of parking spaces in non-residential buildings, water tax, fire tax, tax on advertisements (except newspapers), surcharge on entertainment tax, surcharge on electricity consumption, tax on congregations, tax on pilgrims and tourists, tolls, tax on trade and professions), user charges for civic services and fees and fines for regulatory and statutory functions. There is a small problem with the Bill as it stands. Because of tenancy laws and alienation concerns, it is often not possible to create new holdings on such lands. Therefore, it is not possible to charge property tax on these lands and buildings. However, it should be possible to create a category called household user fees. This is not specifically mentioned in the draft Bill and doesn't quite come under the category of user charges for civic services. Having said this, all such rates are presently low. If they are increased, especially property taxes,

[84] *Report of the First State Finance Commission*, *Devolution to Urban Local Bodies (ULBs)*, April 2009.
[85] *Draft Annual Plan 2010-11*, Planning and Development Department.

ULBs, unlike PRIs, should not have to depend on downward devolution of funds from the State government. While a full-fledged State Finance Commission may, or may not, be created for Jharkhand, a priori, there seems to be no reason why hard budget constraints should not be imposed on ULBs.

Figure 6.1: Population in Major Cities of Jharkhand



Source: City Skyline of India, 2008-09

6.6 As of now, only Ranchi, Dhanbad and Jamshedpur are covered under JNNURM. In addition, some Central funding is available through UIDSSMT (Urban Infrastructure Development Scheme for Small and Medium Towns), IHSDP (Integrated Housing and Slum Development Programme), Basic Services to Urban Poor (BSUP) and even SJSRY, NRCP, NLCP, NUIS and ILCS. But this apart, no downward devolution need be available to ULBs. There are also restrictions on State government guarantees on municipal bonds. Therefore, though JNNURM only covers three cities now, the JNNURM template has a more universal application. This includes the levy of appropriate user charges. While Jharkhand may be poor, that is fundamentally a rural problem, not an urban one. The present BPL identification is also a rural one. If it is extended to urban areas, one can contemplate an exemption from user charges for BPL households. But that should not be interpreted as an argument for across the board exemption from user charges. Continuing with the JNNURM template, PPPs can also be used to drive investments in infrastructure and SPVs (Special Purpose Vehicles) has been floated, for example by ILFS. All this is contingent on capacity being created within ULBs. ULBs should no longer be appendages of the Department of Urban Development. One possibility is to create a local body cadre or an Municipal Executive Officers cadre with flexibility for each local body to hire from the pool, since deputations don't necessarily work. Among other things, ULBs need

to have far better internal financial management and accounting and auditing principles, following the National Municipal Accounting Manual.

6.7 Land is a valuable asset. In Jharkhand's urban areas, no ready inventory exists of land. Revenue records are old and mutations have not taken place. There have been encroachments and property is sometimes stuck in litigation. If this inventory is done, and GIS can help in this, vacant land can be sold off. For example, the Mumbai Metropolitan Region Development Authority has auctioned land assets in the Bandra-Kurla region to fund expenditure on roads, mass rapid transit systems and affordable housing.

6.8 Jharkhand still does not have a housing policy. The National Housing Bank (NHB) aids in the formulation of housing policies and has done so for Kerala and Rajasthan. These are also being finalized for Kerala, Rajasthan, Uttar Pradesh and Bihar, with a specific focus on EWS/LIG segments.[86] NHB should be invited for this purpose. Perhaps one should mention that Singapore provides public housing for 80% of its population through a dedicated Housing Development Board, using land monetization and interest rate subsidies. Other than auctioning off vacant land, in line with what was said in the context of jails, there needs to be a consolidation of land occupied by the government, even if that land happens to have been given out on lease. This land is often on prime locations and has high market value. It can be sold off and the proceeds used to construct modern and consolidated government offices along the periphery of the town. A standard complaint about lack of fast-track clearances in Jharkhand is that government offices are scattered and often, physical movement of files does have to take place. Such unnecessary inefficiencies can be reduced with government offices located in a single spot. Irrespective of whether greater Ranchi is built, this needs to be taken up urgently at the state level. This translates to having a secretariat, legislature, high court etc. close to each other. It is understood that the government has been able to recover about 2000 acres from HEC. This land should be used for that purpose.

[86] http://www.nhb.org.in/Urban_Housing/Housing_policies.php

Section 7.1: Physical Infrastructure – Roads

7.1.1 The most important segments of physical infrastructure are roads, electricity and water. These are the items that we will focus on, with a few comments about rural housing. Roads are an important element in ensuring transport connectivity. A World Bank study estimated that ensuring a good road can increase a rural community's income by 18%.[87] In broad terms, the road infrastructure consists of (a) National Highways; (b) State Highways and Major District Roads; and (c) Rural Roads and Minor District Roads. These can be regarded as the primary, secondary and tertiary segments. There have been several recent developments. The Jharkhand Highways Act of 2005 was passed. The Jharkhand Highways Rules of 2007 were notified. The State Highways Authority of Jharkhand (SHAJ) was constituted. With ILFS, the Jharkhand Accelerated Road Development Company (JARDCL) was set up as a SPV under the PPP mode, though a clear PPP policy is still awaited. There are standard bidding documents and this process can be accelerated. The Jharkhand Rural Roads Development Authority (JRRDA) has been set up. A Jharkhand State Road Development Fund (JSRDF) is on the cards. There will be quality control directorate, e-tendering, loans from multilateral agencies (ADB) and HUDCO/NABARD and a blueprint for user charges.

Figure 7.1: Jharkhand Road Network

Source: Transweb Solutions India Ltd

[87] *Jharkhand: Addressing the Challenges of Inclusive Development*, The World Bank, 2007.

7.1.2 There is a lot of backlog. If one includes rural roads, the road length in Jharkhand is 414.3 per 1000 sq km, compared to a national average of 1008.4. Normalized by population, the road density is 861 km per million population, compared to a national average of 2,828. The road network is inadequate not just in terms of quantity, but also quality and capacity. About half of the villages lack connectivity in the form of all-weather-roads. The deficiencies are in the form of (1) inadequate road capacity (requiring widening); (2) insufficient pavement thickness (requiring proper designs); (3) poor riding quality (requiring resurfacing and partial strengthening); (4) congested city sections (requiring bypasses); (5) sub-standard curves (requiring realignment); (6) imbalance in networks; (7) vehicle pollution; and (8) over-loading. New roads have to be built. Roads have to be upgraded. Around 5% of major district roads, which are newly-declared major district roads, are still "kutcha" roads.

7.1.3 There are 12 National Highways, including NH-98, NH-99, NH-100, NH-75 and NH-75(E), converted into National Highways after Jharkhand was formed. The National Highways are in particularly bad shape, especially those that were converted into National Highways after the State was formed. The National Highways are the responsibility of the Ministry of Surface Transport and are maintained by the Central government, with the Road Construction Department (RCD) as an agency. There is a temptation to ask for conversion of State Highways into National Highways or Inter-State Highways, since Central funding becomes available. But this is not the right approach, as conversion only leads to delays in road improvements. In addition, Central funding is available for National Highways and State roads in districts that are affected by LWE-extremism. On the face of it, all National Highways should be 4-laned, an objective pursued in Bihar. Sanctions and procedures by the Central government take an inordinately long time, a fact acknowledged by the Central government itself. For example, the Mid-Term Appraisal of the Eleventh Five Year Plan states, "Other important reasons for slow progress in implementation of NHDP include long time taken for completion of preconstruction activities and inadequate implementation capacity of NHAI. This is a Catch-22 problem. Should a State government use its own funds to upgrade and maintain National Highways, and then hope for subsequent reimbursements from the Centre? Though this may not be possible for all highways, for the important highways where the need to upgrade is critical, it would be in the interest of the state to adopt such a strategy.

7.1.4 In that case, there is a question of raising resources. As a back of the envelope kind of estimate, staggered over a period of five years, road up-gradation will cost around Rs 1600 crores a year. There should be a Jharkhand State Road Development Fund. This can be based on a cess of Re 1 on petrol and 50 paise of diesel. This is a cess, not a tax and should not feed into budgetary flows.

7.1.5 Additional funds should be used not only for construction of new roads and their up-gradation, but also for bridges. The positive externalities from construction of bridges are often more than that from constructing roads. In the absence of bridges, blocks and villages are often cut off from each other. The afore-mentioned World Bank report computes that community income increases from connection to wholesale markets amount to 40%.[88] There are other avenues for fund collection as well. First, additional funds can be generated through a special purchase tax on two-wheelers, cars and agricultural tractors. Second, it is possible to tap external sources, not just the ADB, but also the World Bank. Third, there are possibilities of revenue generation from development activities that are carried out by private parties along roads. Fourth, PPP options exist. The government has talked about the Swiss challenge system.[89] In principle, this is always possible. However, the experience with the Swiss challenge system has been varied across countries. While there are some successes, it is not invariably the case that Swiss challenges have always been successful. It is best to announce a clear PPP policy with a menu of possible options – EPC, annuity[90], shadow-tolling, regular tolling and viability-gap funding. However, it is unlikely that more than 15% of the total costs will be covered through privatized or quasi-privatized options.

7.1.6 Roads are not just about construction, but their maintenance too. Therefore, BOT models have much in favour of them. For other roads, it is possible to adopt output and performance-based long-term maintenance contracts for a period of say, at least 5 years, if not 10 years. However, developers are not always interested in operating. The framework should therefore provide for an exit option for developers and an entry option for operators. Operators also possess greater expertise in operation and maintenance (O&M). For roads that can have tolls, there is a Model Concession Agreement prepared by the Planning Commission, for operation, maintenance and tolling. This can be adopted. For roads that can't have tolls, one can still introduce maintenance contracts. Phases 1 and 2 of PMGSY do not have a maintenance component. There should be a clear policy for their being taken over by RCD. There is lack of coordination between the Road Engineering Organization (REO) and RCD, with a lack of clarity about who is responsible for which part of the network, or about different aspects of the same road – construction, operation or maintenance. Rural roads are arbitrarily assigned to REO or RCD/PWD. A regular meeting between key decision-makers in both organizations

[88] World Bank, *ibid.*

[89] The "Swiss Challenge System is a process to help private operators in suggesting innovative and new type of projects that have not been initiated by the government. The private player (which could be a NGO or a cooperative or a corporate) makes an offer to the government. The government makes this offer public and allows counter offers by third parties on that project. If a third party bids, the original proponent gets another chance to provide a better bid. The best bid wins.

[90] However, annuities can under the purview of FRBM deficit reduction targets.

needs to be instituted to mutually resolve matters, and report to higher authorities' matters where they are unable to decide.

7.1.7 In general, the main reasons behind bad roads are processing incapacity (regulatory clearances, bidding systems, dispute settlement); difficulties in land acquisition, resettlement and rehabilitation, removal of utilities, forest clearances; shortage of funds; lack of clarity about roles and lack of coordination; outdated business and management practices; serious staff shortages; poor implementation capacities; corruption (with a nexus between engineers and contractors); lack of maintenance; law and order problems; delays in finalizing core networks; poor designing; lengthy tendering procedures and consequent delays; lack of good contractors; and discontinuity in the supply of bitumen. These are not problems specific to Jharkhand. Nor are they always specific to road construction projects. A McKinsey report identified poor quality of planning and engineering design, tendering of unviable PPP projects, use of inappropriate contracts, centralization and delays in pre-tender approval processes, delays in land acquisition, ineffective dispute resolution, weak performance management, insufficient skilled and semi-skilled manpower, weak risk management skills, below-par design and engineering skills, inferior procurement principles and low prevalence of lean construction principles.[91]

Table 7.1: Percentage of Habitations connected by pucca roads (%)

State	2000	2010
Bihar	30.8	46
Chhattisgarh	27.5	78
Jharkhand	50	60
Orissa	42.1	68
Uttarakhand	48.8	58
West Bengal	30.5	59
All India	59.2	73

Source: PMGSY, Ministry of Rural Development, JDR 2011
Note: pucca roads are the all weather roads

[91] Prashant Gupta, Rajat Gupta and Thomas Netzer, *Building India, Accelerating Infrastructure Projects,* McKinsey & Company, August 2009, http://www.mckinsey.com/locations/india/mckinseyonindia/pdf/Building_India_Executive_Summary_Media_120809.pdf

7.1.8 Which of these problems can be solved quickly? First, land acquisition is going to be a problem. Therefore, a project should not be started until a substantial amount of the land has been acquired. Otherwise, it simply leads to delays and cost and time over-runs. Second, JRRDA needs to be strengthened, with greater inter-agency coordination. Especially, if there is a State Road Development Fund, it might be a good idea to create an autonomous Infrastructure Board or a Road Board, under the Chief Minister, to administer this fund, oversee the programme and ensure convergence. Third, there is a manpower shortage at the Assistant Engineer (AE) and Joint Engineer (JE) level and there are also allegations of a nexus between JEs and contractors. If there are surplus engineers other arms of the government such as the irrigation department, they can be redeployed, provided they possess the requisite expertise. That apart, since most of the work done by JEs is inspection according to a routine template and requires no special technical expertise, it should be possible to hire JEs on the basis of contracts. Fourth, to break the nexus, as a general principle, a contracting engineer should not have the powers to vet financial payments. Those powers should lie with a different engineer. Fifth, because engineers are often saddled with administrative functions, there are complaints that DPRs (Detailed Project Reports) are not ready on time. It is worth exploring whether such functions can be outsourced to consultants. Sixth, there are complaints about quality, such as crust thickness, quality of stone and low percentage of bitumen. The templates for a quality policy, quality assurance plan and quality audit should be clearly laid down, so that flying squads can carry out their inspections according to these. Seventh, GPRS-enabled mobile phones can be used for real-time project monitoring. Bihar's road construction department is employing cellular phones for such purposes. AEs or EEs take pictures of constructed roads and upload them on the RCD website and the RCD Secretary then monitors them, using free Maps on the internet. The costs are not much and pilots can be started in LWE districts. Eighth, there should be an Appraisals Committee for all PPP projects. Ninth, the PWD department needs to be modernized. While account codes and work manuals exist, they need to be brought in conformity with Central frameworks. Standardization will facilitate the accelerated roll out of bankable projects and 20% of capital costs can be obtained as VGF grants from the Centre and 20% more as long-term loans from IIFC. Tenth, Central funding under PMGSY does not cover all costs. For example, construction of all-weather roads is not permitted for villages that are situated less than 500 metres away from main routes or roads. Nor are funds available for tender excesses, shifting of utilities or maintenance. But it is recommended that State budgetary support be made available to plug these gaps in the PMGSY network. Infrastructure Development Finance Corporation (IDFC) can help in developing integrated road network plans for Jharkhand.

7.1.9 Post-development maintenance provisions have now been made mandatory in the award of contracts. But this is not without its problems. Roads are built to carry a

certain load. These loads are invariably exceeded by commercial vehicles, particularly trucks. The roads are consequently damaged and contractually, the contractor entrusted with the work of maintenance has an escape clause. Most of these trucks are registered outside the State and the problem is particularly acute in mining and industrial areas. It is estimated that 22% of the road length is in mining and industrial areas. With economic growth and the use of multi-axle trailers, the problem will only increase. The transport department is incapable of enforcing the loading norms. Hence the road building norms for areas where there is large freight traffic need to be higher than is otherwise warranted. A cess should also be levied on commercial vehicles and this cess used to construct integrated check-posts at exit points from the State, with weighing stations there too. It is estimated that each such integrated check-post will cost about Rs 5 crores. Eventually, these integrated check-posts can use information technology. 90% of trucks are owned by larger operators. It is possible to electronically furnish details of truck-loads in advance, using smart cards, thus subjecting only about 10% of trucks to manual inspection. The actual running of the check-post can be outsourced to educated unemployed, along the lines of STD booths or cyber-kiosks, with support functions from the motor vehicles, forest and indirect tax departments. The integrated check-posts should also have provisions for electronic payment of penalties. TCS (Tata Consultancy Services) has expertise in developing software along similar lines. While Jharkhand has plans for 10 integrated check-posts, without a clear cess, financing them will be a problem. In addition, out-sourcing of functions do not seem to be part of the present plan.

7.1.10 A few comments are also necessary on road transport. To reduce vehicular pollution, there should be a 10% green tax on all commercial vehicles that are older than 12 years. Pollution checks and pollution control certificates should also be mandatorily enforced. In addition, there should be a scheme to improve transport connections in the rural areas. The answer does not lie in a publicly run bus service. For example, Delhi government runs a Gramin Seva, with 9-seater Mahindra or Tata Magic vehicles and permits are issued for these. Permits can be given not only for these, but also buses. The key question is whether permits should be issued to individual operators or larger companies that operate several vehicles. Governance and enforceability become easier with large companies. But if the private carriage operators are perceived to be corporate, there is likely to be a negative backlash. One way of handling this is to a have a policy, with regulations in place, which awards permits to cooperatives, as well as to corporates.

Section 7.2: Physical Infrastructure – Electricity

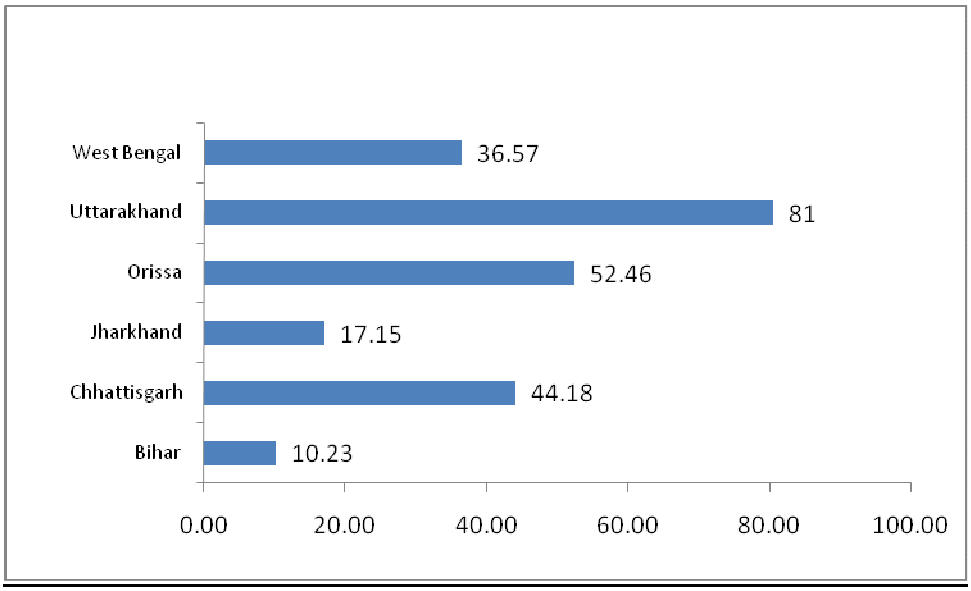
7.2.1 The electricity sector is an integral engine of economic growth. The correlation between per capita income and per capita power consumption is very strong. Per capita consumption of electricity in Jharkhand is only 300 KwH, compared with 650 KwH for India and 838KwH for Chhattisgarh. This low figure is not driven by a lack of demand. Demand has outpaced supply during the 2000s. Current estimates suggest that available power supply is 14% below peak demand, at an aggregate State-wide level. The present installed capacity of Jharkhand is 1320 MW, comprising 130 MW Hydro and 1190 MW thermal. Jharkhand's power generation was 450 MW in November 2000, which declined to less than 300 MW in 2010. Apart from own energy generated from its own plants, Jharkhand State Electricity Board (JSEB) purchases more than five thousand Million Units of electricity from outside and gets a share of about 134 MW from central power stations.

7.2.2 There are several deficiencies in the power sector. Generating capacity has not been increased over the last 10 years. There is a very low operating performance of plants, In rural areas, power is available only for purposes of illumination. There are significant accumulated financial losses in the sector. There is a high level of receivables. There is a high failure rate of distribution transformers. ARRs (Annual Revenue Requirements) have not filed by JSEB, affecting the timeliness of tariff orders. In view of the poor supply, consumers have strongly opposed tariff hikes in hearings held by the JSERC. There has been poor progress in metering. The State suffers from high technical losses and theft, even though it has a very favourable consumer mix. The quality of data and MIS availability is very low. There are several institutional deficiencies. There has been no unbundling along functional lines. The rural electrification record is poor. RGGVY implementation has been slow. The transmission network is inadequate to cater to the expected growth in loads. There has been implementation of the APDRP (Accelerated Power Development and Reform Programme). While open access regulations have been finalized, the open access charges have not been formulated. The policy is not conducive for captive generation. There is no policy on renewable energy. One thus has to address generation and reach of the grid and devise off-grid solutions for villages or areas that are not likely to be connected to the grid. T&D and AT&C (Aggregate Technical & Commercial) losses have to be reduced. However there is a lack of metering not only at the endpoints, but also within the system. This impacts the ability of the administration to identify the points or segments where the T&D and ATC losses are occurring.

7.2.3 Jharkhand has 1320 MW of installed capacity (excluding DVC), but actually produces only between 300 to 500 MW. This is because very few of the ten units of PTPS

(Patratu Thermal Power Station) actually function (PLF for 2006-07 was 9.12%). 6 of the 10 units are around 40-years old and need immediate modernization, thus contributing to improving the PLF of this plant. Jharkhand purchases most of its power requirements because of the poor performance of its own plants and because it has not added capacity either. It was proposed that three more units would be added to Tenughat Vidyut Nigam's (TVNL) existing capacity, but this has not been implemented yet. Since Jharkhand is rich in mineral resources, it has received keen interest from private players for installing additional capacity during the 11th Five-Year Plan. Although CEA (Central Electricity Authority) projections do not show any private sector capacity additions, the State has signed MoUs for more than 30,000 MW with companies like ArcelorMittal, Tata Power, Jindal Group, CESC, Aditya Birla Group, Reliance, Lanco Infratech, DVC and NTPC. If all these projects come online in time, Jharkhand will be able to meet its energy requirements. However, the additional contribution from private sector projects that have not been finalized yet will be important in order to meet the heavy peak demand.

Figure 7.2: Power availability per lakh population (in million units)



Source: Central Electricity Authority

7.2.4 The resistance of people against land acquisition has become a big hurdle in setting up a new generation plant. Is it possible to exempt districts which have power plants of over 1000 MW capacity from load-shedding? Areas within a 5 km radius from a power plant greater than 10 MW can be exempted from power cuts. Such initiatives will help reduce local opposition to power projects. Moreover, for every power project a share of the proceeds should be earmarked for local area development activities, including for improving agriculture. This will to some extent reduce the impact of negative externalities in a larger radius.

7.2.5 Jharkhand should create bankable projects, with all the required elements broadly in place, prior to bidding. The government of India has allotted two prestigious coal blocks, Banhardi (Latehar district) and UrmaPanari (Dumka District) to Jharkhand, especially for JSEB. Jharkhand must acquire land ex-ante at viable sites. The power department must identify sites for new power plants. Power Finance Corporation can be used as the dedicated lead agency to secure all clearances, such as those related to water, environment and forests. Auctioning these projects after clearances have been obtained will also enable the state government to benefit rom better terms than if the clearances are to be obtained by the power producer.

7.2.6 Jharkhand should introduce open competitive bidding, with a single bid criterion rather than cost-plus tariffs. This will reduce the charge of crony capitalism. Chhattisgarh's attempt at adding power capacity through tariff-based competitive bidding was very successful. The winner has quoted an aggressive 81 paise per KWH, edging out the next-best contenders - 88 paise per KWH and 89 paise per KWH. The winner got the mandate for setting up a 1600 MW project. The developer will sell 65 per cent of the power generated through the project to CSEB, while the remaining 35 per cent will be available for merchant sale. The developer is thus expected to make up for the seemingly low tariff through the free-sale component.

7.2.7 Besides coal, Jharkhand should also focus on gas-based and hydro power projects. Gas-based and hydro power projects are good for peaking capacity. There are a few potential sites for hydro project development - Sankh - II Hydel Power Station (Gumla District, 2 x 3 + 2 x 90 MW), KanharHydel Power Station (Palamu District, 3 x 100 MW), TilaiyaDhadhar (50 km from Ranchi 2 x 25 MW), Dassam (40 km from Ranchi, 40 MW), Jonha (60 km from Ranchi, 40 MW), Mohane (200 km from Ranchi near Chatra, 120 MW). The gestation periods and capital expenditure for gas-based power projects are relatively lower than for coal-based projects. The GAIL pipeline Hazira-Bijapur-Jagdishpur (HBJ) network will cover Jharkhand. Jharkhand should approach the PNGRB (Petroleum and Natural Gas Regulatory Board) and the Union Government for allocating gas to the State at an affordable price, for setting up gas-based power projects. Besides, India possesses shale gas, a potentially abundant, yet untapped source of energy and India has been encouraged by the US success in this. Shale gas is natural gas found in shale rock formations. Shale rocks have been found in Gujarat, Jharkhand and Assam.

Table 7.2: District-wise proportion of households electrified (%)

District	2002-04	2007-08
Bokaro	60.21	61.32
Chatra	14.44	24.59
Deoghar	30.58	43.19
Dhanbad	83.66	83.06
Dumka	20.38	24.57
Garhwa	9.73	24.76

District	2002-04	2007-08
Giridih	24.79	15.99
Godda	16.12	26.82
Gumla	6.85	13.30
Hazaribag	57.20	60.10
Kodarma	31.25	48.68
Lohardaga	15.96	25.37
Pakaur	9.48	13.99
Palamu	8.71	22.84
Pashchimi Singhbhum	22.47	39.41
Purbi Singhbhum	67.08	69.39
Ranchi	48.11	54.59
Sahibganj	14.78	14.64

Source: District Level Household Survey, Ministry of Health and family Welfare

7.2.8 Jharkhand has to modernize transmission lines. This includes setting up of grid stations and new transmission lines and strengthening all existing power lines, besides ensuring supply of quality with a minimum loss of transmission. Thirteen new transmission lines have been proposed and Jharkhand has sought Rs 2,000 crore as assistance from the Centre for this. The State has decided to lay new transmission lines from Tenughat to Govindpur and Dumka in the Santhal Parganas, between the Patratu station and Hatia grid in Ranchi, and to connect Garhwa and Japla with Daltonganj and Patratu. It is possible to explore innovative solutions and invite the private sector to build new transmission lines on an annuity basis, having identified problem-corridors and weak spots on the grid. A cess can be levied on generation, to pay for the annuity streams.

7.2.9 For the first time in the country's history, there will be such an enormous concentration of coal-based power projects in a small territory, with the pit-head concept. There are 50 MoUs that have been signed by the government of Jharkhand. And currently, the evacuation of power is divided between the Powergrid and the state transmission utilities. In these MoUs, generators are asked to make arrangements for evacuation, which is a very inefficient way of doing things. Chhattisgarh, with the help of IDFC, is forming a separate company for power evacuation from the Independent Power Producers (IPPs). Some 17 IPPs have already signed MoUs for the evacuation of power. The idea is to create third-party intermediation through an integrated network. The new idea will lead to savings in the cost of power, as transmission distances will come down. Jharkhand should follow the same model.

7.2.10 Distribution is in bad shape. There are tangled wires, illegal connections, burnt-out transformers, wrong billing and unpaid bills. JSERC has reprimanded JSEB for laxity on several counts – not filing ARRs, poor progress in metering, inadequate record-keeping and reporting, decreasing sales to high value segments of industry and railways, and so on. In a petition filed by JSEB before the JSERC, the total number of

consumer was stated to be 6,29,127, of which, 3,20,845 were unmetered connections.[92]

7.2.11 The general principle should be that urban clusters should be franchised, with discoms focusing on rural linkages. Private franchisees — incentivized to bring down losses — should manage urban clusters. Examples include Mumbai, Delhi, Agra and Kanpur. Jharkhand government had decided to privatize power supply in Ranchi in 2003. This was to be followed by privatization in Jamshedpur, Dhanbad, Hazaribagh and Dumka. However, the privatization did not materialize. In late 2006, JSEB decided to enter into a JV for power management in Ranchi, Jamshedpur and Dhanbad and sought expressions of interest from private parties. It also approved the proposal to appoint franchisees in the supply division for the maintenance of power substations and supply lines, raising bills and revenue collection. It planned to initially hand over work to franchisees at 2 to 3 power substations in each of the 13 circles. Eight companies had shown interest in the scheme. However, any implementation may have to wait for notification of the transfer policy for employees of JSEB. Jharkhand Cabinet approved the transfer policy in 2007, but has not notified it yet. The matter went to Jharkhand High Court, where it is sub judice. JSEB has been inefficient. JSERC has not been able to push it to improve. Consumers are dissatisfied, thefts and other losses are high, generation is grossly inadequate and the unbundling process has been stalled.

7.2.12 Promoting "last-pole" service providers will improve distribution efficiency at sub-station levels, through franchisee agreements. These would be small distribution companies, community-based organizations, or cooperatives, willing to distribute power at the substation level. The efficiency of existing distribution systems can be improved through public-private partnerships, where private initiatives piggy-back on public investments to increase efficiency. A private company can take over the distribution rights of the public enterprise at the sub-station level, lease the existing high tension wires, and invest in low–tension wires and meters to improve their efficiency. This should allow reasonable returns on investment, as well as a fixed return on the leased capital asset.

7.2.13 The APDRP of the Tenth Plan has generally failed. Funds were channeled for procuring sophisticated equipment for sub-station revamping. But dedicated measures to reduce Aggregate Technical and Commercial (AT&C) losses were left unattended. It was with this learning that the Restructured Accelerated Power Development and Reform Programme (RAPDRP) was introduced in the Eleventh Plan. This revamped programme has laid out clear objectives of actual demonstrable performance, in terms of sustained AT&C loss-reduction, through IT enablement, distribution system strengthening and capacity building. The key issue, however, is

[92] http://jserc.org/powerscenario.html

that this scheme is not merely about technology and infrastructure strengthening. Successful reform lies in ensuring motivated participation and sustainability at the ground level, energized by a proactive political and bureaucratic regime. Issues centred around governance and administration, therefore, gain ascendancy over one-time implementation.

7.2.14 Power procurement is a major issue. Jharkhand losses Rs 88 crore every month as it purchases power worth Rs 213 crore, only to sell it at subsidized rates for Rs 148 crore. Against this, JSEB manages to realize barely Rs 125 crore from its consumers every month. Jharkhand should procure power through Case 1 bidding. Under Case 1, a supplier is free to supply power to the procuring agency from any project, regardless of fuel type or location. The power purchase agreement is usually valid for 25 years and typically takes shape within 48 months from the contractual date. This will help in procuring power at lower rates. Open access should be implemented. Initially, this was anchored to PPAs only. It is now well accepted that the solution lies in merchant-power, where the risks of prices changing on spot basis are mitigated by the sheer enormity of the deficit. Merchant power capacity is expected to increase significantly. Open access is crucial to this move. Even though the Electricity Act, 2003 mandates open access, Jharkhand continues to prevent free flow of power. Open access regulations have been finalized. However, open access charges have not been formulated. But one should be careful in implementing open access, since it is possible for high-value customers to migrate to alternative suppliers, while the public sector provider is saddled with low-value and subsidized consumers. This has fiscal implications.

Table 7.3: Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) in Jharkhand

States / UTs	No. of Connections to Rural Households (2010)		
	Coverage Target	Achievement	
		Number	Percentage
Andhra Pradesh	3,954,128	2,970,421	75.1%
Assam	1,414,828	365,123	25.8%
Bihar	6,022,036	1,295,859	21.5%
Chhattisgarh	1,285,545	392,343	30.5%
Gujarat	1,595,853	526,430	33.0%
Haryana	569,686	123,490	21.7%
Himachal Pradesh	36,479	2,231	6.1%
Jammu & Kashmir	295,221	25,079	8.5%
Jharkhand	2,926,260	871,631	29.8%
Karnataka	1,932,797	854,084	44.2%
Kerala	92,736	16,510	17.8%
Madhya Pradesh	2,653,536	261,137	9.8%
Maharashtra	2,633,742	833,788	31.7%
Orissa	4,858,292	1,095,636	22.6%
Punjab	405,023	23,765	5.9%
Rajasthan	2,229,442	1,297,412	58.2%

States / UTs	No. of Connections to Rural Households (2010)		
	Coverage Target	Achievement	
		Number	Percentage
Tamil Nadu	1,692,235	493,388	29.2%
Uttar Pradesh	1,694,075	866,648	51.2%
Uttarakhand	357,309	217,107	60.8%
West Bengal	3,974,005	686,541	17.3%
Arunachal Pradesh	76,407	3,891	5.1%
Manipur	192,148	7,139	3.7%
Meghalaya	188,648	23,351	12.4%
Mizoram	44,334	5,162	11.6%
Nagaland	142,992	11,838	8.3%
Sikkim	28,166	459	1.6%
Tripura	228,759	35,881	15.7%
Total / All India	41,524,682	13,306,254	32.0%

Source: Ministry of Power; Web Site: http://www.powermin.nic.in/rural_electrification/

7.2.15 Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) was launched in April 2005, by merging all ongoing schemes. Under the programme, 90% grant is provided by the Centre and 10% as loan by REC (Rural Electrification Corporation) to State Governments. REC is the nodal agency for the programme. The scheme aims to electrify all villages and habitations, provide access to electricity to all rural households, and provide electricity connections to Below Poverty Line (BPL) families free of charge. Jharkhand has a poor record in terms of rural electrification and the pace of implementation of RGGVY has been very slow. The reasons behind sluggish progress made in rural electrification work are - dealing with difficult terrain and the law and order issue, the supply of sub-standard materials, corruption, the absence of formal approvals and problems with the BPL list. The surveyed list has to be approved by NTPC first and later sent to the JSEB. This exercise consumes a lot of energy and time, thus delaying progress. APL consumers can't effectively be excluded from RGGVY, thus causing a further load on transformers. Besides, no third party inspections were carried out after completion of work at most places. Jharkhand has recently hired TCIL for carrying out third party inspection work.

7.2.16 Information available with us suggests that there are wires and poles in 14,582 villages, but only 7,581 villages are actually electrified. Rural electrification has to mean that households actually receive electricity, not merely an electric pole with a line going to BPL households, as specified under the Rajiv Gandhi Grameen Vidyutikaran Yojana. If RGGVY money is used for building poles and laying lines to BPL households, without the actual supply of electricity, experience shows that both the poles and wires are stolen. At the very least, it is wasted investment, since there is no electricity flow for years after the investment in transmission lines. Jharkhand needs to prepare and notify a Rural Electrification Plan to achieve the goal of providing access to all households, detailing the electrification delivery mechanisms

(grid or stand-alone), considering available technologies, environmental norms, fuel availability, number of un-electrified households, distance from the existing grid etc. This plan should be linked to, and integrated with, District Development Plans, as and when such plans become available. And PRIs need to be involved in monitoring.

7.2.17 The government is toying with the idea of floating a new power utility company for ensuring uninterrupted supply in rural areas. To be set up on a public private partnership (PPP) basis, this new entity will cater to the needs of villages obtaining power connections under RGGVY. However, we need to ask some questions. What is the most effective way of meeting the energy needs of the poor? Who foots the bill for the new technologies? How does one ensure quality power, improve access and develop the regulatory and institutional support for energy needs of poor? We suggest that Jharkhand should adopt a three-pronged strategy of (a) focusing on promoting last-mile service providers to improve the efficiency of distribution, (b) removing barriers to the entry of local vendors and other informal providers, and (c) providing new connections based on socio-economic and technical criteria of schemes like PDS. In situations where it is uneconomic to connect households to wired services, informal providers could be encouraged to supply small volumes of power. This will introduce much-needed competition at the district level. An advantage with services operating at district levels is their incentive to focus on cost-reducing technologies, franchising services to vendors, and making operations more efficient. Suitable measures may be initiated to give legitimacy to all informal providers, for example, through a low-cost registration system for local vendors. This approach will promote new small-scale developers who can produce power using new technologies. From the objective of promoting private investment in rural electrification, the most welcome provision of the Electricity Act 2003 is that the requirement of a formal license is dispensed with, for generation and distribution of electricity in rural areas to be notified by the state government.

7.2.18 Another issue is RGGVY's single-phase line clause. Jharkhand has demanded that it be allowed to convert to the three-phase option, so that rural water supply schemes, which require such connectivity, can run smoothly. In Gujarat, the Jyotigram scheme for power has provided regular, high-quality electricity to villages. Jyotigram provides separate electric feeders for domestic use and pump-sets. This permits the State to supply round-the-clock domestic supply, while limiting agricultural supply to eight hours a day (which is continuous and of constant voltage). This has facilitated a switch to high-value crops like mangoes, bananas and wheat, which need assured water. Constant voltage has protected farmers from damage to pump-sets, earlier caused by fluctuating voltages. Continuous power for non-agricultural uses has spurred diversification into non-farm activities. Food processing, processing of hitherto low value forestry produce etc. have tremendous employment and welfare implications for the underprivileged.

7.2.19 JSEB has not been unbundled, even after thirteen extensions of the deadline for doing so. Jharkhand High Court ordered unbundling by 30th September 2007, but this order was struck down by the Supreme Court, which decided that the unbundling should be carried out only as per the provisions of the Electricity Act 2003. This implies that the assets of Bihar State Electricity Board and JSEB be divided clearly first. This has also been the contention of employees of JSEB who have been opposing unbundling. Employees of SEBs have been generally opposed to unbundling, as they fear it would lead to privatization and subsequent job losses. The effect of sectoral reforms on incentives to provide broad access to electricity services and on the price at which these services are available are enormous. If each function is given to separate companies, it becomes easy to identify who is losing how much money and where. In a SEB structure, all accounts remain common for transmission and distribution, and there is no accountability. Jharkhand should adopt a model like West Bengal, where there was no lay-offs in the unbundling process. West Bengal ensured that it consulted all the key stakeholders throughout the process. The dialogue mechanism was a Joint Management Council, comprising directors and heads of departments and representative workers from recognized unions and associations. Unbundling should be managed with the participation of employees, even though this will be time-consuming. It is worth spending the time on generating a consensus.

7.2.20 Though there is a favourable consumer mix, Jharkhand suffers from high technical losses and theft. AT&C losses, which represent the share of total electricity consumed in the state on which no revenue is realized, are as high as 65%. Some of HT connections are also unmetered. No commercial enterprise can be financially viable with such a high rate of default in revenue realization. The government should adopt a carrot and stick policy. All initiatives flow from metering, since it enables the provider to know exactly where the losses or revenue leakages are taking place, and hold the local manager accountable. Jharkhand should start the 100 per cent electronic metering project not only at the end points but also at within the grid. This should be followed up by meter-by-meter energy accounting and auditing, as this is not a capital intensive process. However, electronic metering should probably be offered as an option to consumers and not made mandatory. This will also help for the unbundling of JSEB in the future. The State should have also performance-linked incentives. The gains through low Aggregate Technical and Commercial (AT&C) losses should be monetized and 15-20% given back to employees as incentives. T&D losses are as high as 51%, highest in the country. The Prime Minister has constituted a high-level panel headed by the former Comptroller and Auditor General, V.K. Shunglu, to look into mounting transmission and distribution losses and suggest corrective measures. The panel will assess the financial position of distribution companies and SEBs, and project losses between 2010 and 2017. Besides, it will review the managerial structure of the utilities and recommend a plan

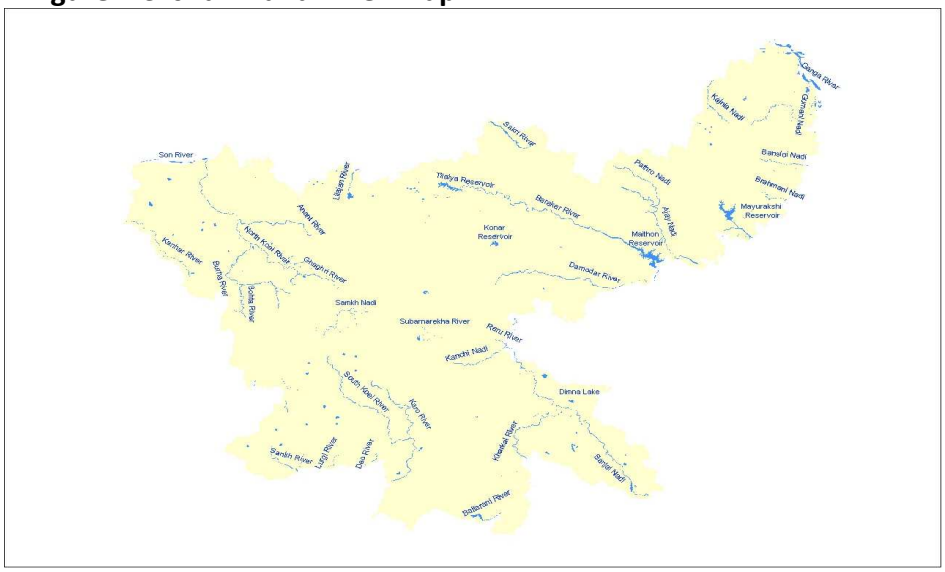
of action to achieve financial viability in power distribution by 2017. The panel is expected to submit its report by the end of February 2011. In its first meeting, the panel favoured legal powers for SEBs to recover their dues, along the lines of those given to banks. Jharkhand must take a lead in implementing this provision. Proper maintenance of transformers and replacement of old transformers will reduce distribution losses. The cooperation of residents, panchayats, civil society, NGOs and power user associations should be sought to identify and control cases of power theft, or theft of transmission wires and transformers.

7.2.21 Although Jharkhand is a mineral-rich State, it has very little potential in non-conventional energy sources. The Jharkhand Renewable Energy Development Agency (JREDA) is the nodal agency for developing non-conventional energy sources. JREDA was formed in 2002, but has achieved very little in generating power from these sources, beyond small distributed generation. Under-staffing has been cited as a reason for under-performance, though this does not sound very convincing. Following the guidelines of the Central Electricity Regulatory Commission, the State can make it mandatory that at least 3% of the State's total power purchases must come from non-conventional sources by 2014. Pushing green power onto the grid will also provide an opportunity to trade in renewable energy. JSERC has issued tariff orders only for small hydel projects. These are the only non-conventional energy source of consequence. JSERC, in its order in 2007, has specified norms (auxiliary consumption, debt to equity ratio etc.), but not the benchmark capital cost and capacity utilization factor. It will decide tariffs on a case-to-case basis till these are fixed. The return on equity has been specified as 16%. JSERC should also set tariffs for wind, biomass and solar. Ministry of Non-Conventional Energy Sources has estimated Jharkhand's potential at 170 MW, spread over 89 locations. The present capacity is 4 MW. JREDA has been examining these sites for more than 6 years. These should be developed on BOT basis, through private sector participation. There is a potential for paddy-waste based power generation plants in a few districts. The plants can use a combination of biomass fuel, such as rice straw/husk, jhari leaves and twigs and coal and can have sufficient stocks of fuel to operate throughout the season. Such plants will also increase the incomes of the small paddy farmers in a large area due to their intense paddy husk requirements. The current tariff for sale of power will be around Rs.4.2 per unit of power. To promote power generation from solar energy, the government can consider issuing a solar energy policy as an important component of its non conventional energy policy document. Jharkhand also has a good reservoir of geothermal energy, whose surface manifestations are the steaming grounds and hot springs. The hot springs in the Peninsular Shield of Jharkhand are located along a zone running more or less parallel to Damodar Valley Coalfield, i.e. along faulted boundaries. The thermal springs are found in Tatta-Jarom of Palamau district and Surajkund, Duari, Bagodar of Hazaribag district. A policy for geothermal energy can also be considered.

Section 7.3: Physical Infrastructure – Water

7.3.1 77% of Jharkhand's population state is dependent on agriculture and the existing irrigation coverage is only 23.95% of the arable land. The rate of irrigation is low and it is also distributed extremely unequally, more unequally than the distribution of physical and human assets. Irrigation is critical for increasing agricultural production and productivity. Jharkhand has a total agricultural area of about 29.74 lakh hectares. The 2nd Bihar Irrigation Commission estimated that 12.765 lakh hectares can be irrigated through major and medium irrigation and the rest covered through minor irrigation schemes. Lack of investments, institutional capacity, user participation and inadequate agricultural extension services are some reasons cited for low irrigation coverage. First, the irrigation coverage is low due to lack of investments in the past. Second, technical skills available in the water resources department need improvement in order to design modern irrigation infrastructure and to operate and maintain it. Third, community participation in irrigation operations in has been minimal, contributing to poor services and lack of accountability. The involvement of all stakeholders, especially users, requires enactment of the necessary legislation. Finally, it is necessary to go beyond the line agencies and reach out to the private sector, including NGOs.

Figure 7.3: Jharkhand River Map



Source: ML Infomap Pvt Ltd

7.3.2 The technical scope for irrigation expansion exists. The current low irrigation coverage indicates that there is scope to increase coverage to 40% of the cultivable land. While the groundwater potential is limited (only 25% of total irrigation potential) the scope for surface water irrigation is considerable. The strategy for delivering irrigation requires a mix of (a) increasing irrigation coverage through a mix

of major, medium, minor irrigation schemes and ground water schemes and completing on-going schemes as quickly as possible; (b) making existing irrigation networks more efficient; (c) moving towards effective participatory irrigation management; (d) strengthening and upgrading the administrative infrastructure and improving the existing delivery and monitoring mechanism; (e) promoting equity through investment in areas neglected so far; and (f) introducing new institutional arrangements with a State-level apex body like the State Water Resources Agency. There also has to be a shift from large-scale, centralized, river-flow based water management to decentralized, small-scale, local and rainwater based water management. This calls for community engagement rather than State action, but such community engagement is not favoured by the existing legal system.

7.3.3 There is such a successful model in the Rajiv Gandhi Watershed Management Mission of Madhya Pradesh. This transformed a techno-centric programme into a participatory one. The Mission was set up as a society under the State's Societies Registration Act. The Mission is supervised by the Chief Minister and there is an Empowered Committee (Chaired by the Chief Secretary) to ensure inter-departmental coordination. At the district level, the Collector leads the Mission, but the Chief Executive Officer of the District Panchayat is directly responsible. A District Watershed Advisory Committee and a District Watershed Technical Committee exist at the district-level. The project implementation agency can be a government department, a NGO or a PRI. At the village level, there are village watershed committees, with members from user groups, SHGs and water thrift and credit groups (WTCGs). Villagers contribute through cash, labour or materials to activities and the community can contribute public land. While the details can differ when applied to Jharkhand, the key is the making of irrigation development participatory.

7.3.4 Specifically on major and medium irrigation, land acquisition, technical problems and non-allotment of funds on time have been the major hurdles. There is a need to increase the irrigation outlay to 10%, from the present level of 5%. However, increase in budgetary provisions alone will not help. There are limited experiences with private sector participation in such projects. Brazil and Morocco are the only two instances. Jharkhand intends to link five rivers so that drought-prone areas can be reached and DPRs are being prepared for South Koel-Swarnarekha, Shankh-South Koel and Damodar-Swarnarekha. In this category, the focus clearly needs to be on seven large irrigation projects – Subernarekha, Ajay, Punasi, Amanat, Konar, North Koel and Gumani. Since some of the beneficiaries are in the adjoining States, it is possible to argue that these should become Central projects.

7.3.5 Jharkhand is situated in a plateau region, with undulating topography. The annual precipitation is 1300 mm to 1400 mm. Minor and lift irrigation schemes are more suitable, as they are economical to construct and have low gestation period and do not involve any major land acquisition problem or displacement of population. Out

of the total cultivable area(29.74 lakh ha), only 12.765 lakh ha can be irrigated through Major and Medium Irrigation schemes while the remaining area has to be covered through Minor and Ground water schemes. A definite fact that emerges from an examination of earlier state induced lift irrigation and other schemes is the failure to provide the right kind of policy and institutional support to the schemes.

Table 7.4: Irrigation in Eastern states

States	Net Irrigated Area	Net Area Sown	Total Cultivated Land
		(in '000 hectares)	
Bihar	3,462	5,665	6,232
Chhattisgarh	1,334	4,727	4,982
Jharkhand	142	1,536	2,964
Orissa	2,158	5,624	6,180
West Bengal	3,136	5,296	5,607

Source: Ministry of Agriculture, Govt. of India, 2007-08

7.3.6 A programme known as Gram Bhagirathi Yojana (GBY) has been started for the development of minor surface irrigation system. This is being done through rejuvenation of all existing schemes and construction/repair of ponds, ahars, and check dams in all blocks. The district collector is responsible for reviewing and monitoring the progress of implementation of the scheme. The scheme intends to introduce PIM (participatory irrigation management) through a network of water user associations (WUAs). WUAs have to be linked with village, block and district-level panchayats, since PRIs have the right to monitor water bodies. The formal backing for WUAs already exists in the Bihar Irrigation Act of 1997, since this states that any government distributary, minor water body or water course can be transferred to WUAs formed by beneficiaries, for both operation and maintenance. It is a separate matter that the provisions have not been operationalized. Mention was earlier made of using MGNREGS for construction of watersheds, irrigation channels and land-leveling, with an initial focus on de-siltation. While this is true, the entire exercise has to become much more participative. For instance, all the irrigation laws need to be reviewed, including the Bihar Emergency Cultivation and Irrigation Act of 1955. Apart from the signal this conveys, PIM helps in addressing equity considerations, such as the distribution of water between head areas and tail areas. An example of such a success is in the Bundi Project in Rajasthan, where a rotation programme was introduced, after consultation with the farmers. When water flows were low, this helped completely feed those parts of the system that

flows were directed towards, while the other parts of the system could be taken up for cleaning.

7.3.7 The water rates (both for irrigation and drinking water) also need to be revised. For example, consider industrial purpose. The water rates for industrial consumers are very low and other States have water rates that are ten times higher. These rates should be increased to at least Rs 45 for a thousand gallons. In urban areas, increases in rates are also linked to ensuring better supply of water, waste water management, recycling, desalination and sewage development. ILFS has developed such programmes in Tirupur, Vizag, Ambur/Vaniyambadi and Sriperumbudur and can be roped in. Nor is it the case that people in rural areas aren't prepared to pay higher rates for water. There is a willingness to pay, provided that increases in rates are linked to improvements in water supply. Privatization need not always be equated with corporate sector privatization. For example, BOT models are possible, where consumers are given an option of choosing better water supply at higher rates, or going with the present system. If a sufficient number of consumers opt for the new system, a developer can be entrusted with the task of developing the new system, which is handed over to the ULBs/PRIs after 3 years or thereabouts.

Section 7.4: Physical Infrastructure – Rural Housing

7.4.1 The issue of urban housing has already been addressed. IAY provides assistance to BPL households who do not possess housing. There is also a scheme for providing rural homestead sites to BPL households who are on IAY wait-lists, but do not possess land or homestead sites. If government land is not available, this provides for purchasing and acquiring of private land for such purposes. Jharkhand has not submitted any proposals under this yet. The National Institute of Rural Development (NIRD) undertook a study on the impact of SGSY and IAY on minorities and this included Jharkhand.[93] While the overall feedback is positive, there continue to be problems with IAY and not only because all BPL households have not been addressed through IAY. The quality of construction is poor, temporary materials are used, foundations sag and construction is left incomplete because of inadequate finance.

Table 7.5: Performance of Indira Awaas Yojana

States	Targeted Houses	Houses Constructed	% of houses Constructed out of target
Bihar	1,104,716	637,871	57.7
Chhattisgarh	50,746	33,586	66.2
Jharkhand	90,224	53,636	59.4

[93] *Mid-Term Appraisal of the Eleventh Five Year Plan, ibid.*

States	Targeted Houses	Houses Constructed	% of houses Constructed out of target
Orissa	215,715	151,168	70.1
Uttaranchal	19,383	17,016	87.8
West Bengal	293,153	229,999	78.5

Source: Ministry of Rural Development; Web Site: http://rural.nic.in/rural/

7.4.2 The BPL identification problem is best addressed through decentralized identification through PRIs and has been addressed earlier. There must be transparency and social audit in the publication of these waitlists. Jharkhand has such waitlists, but they are not always adequately publicized, such as through painting them on the walls of panchayat buildings. This must immediately be done. On the structures, the merit of the IAY has turned out to be its weakness, in the sense that construction is left to the discretion of the beneficiaries. The IAY guidelines permit State governments to develop a menu of permissible designs and technology, given the permissible unit cost of an IAY dwelling. The State government is unlikely to possess the capacity to do this. The National Housing Bank will provide assistance to develop such low-cost menus and this option should be explored.

Section 8.1: Increasing the Efficiency of Inputs – Labour

8.1.1 The efficiency of different factor inputs cannot be neatly disentangled, since the efficiency of one factor input impacts on another. In addition, the efficiency of a factor input is contingent on improvements in access to physical and social infrastructure. Having said this, in this section, we focus on efficiency of labour inputs.

8.1.2 Jharkhand has a problem both with skills and with education. The Approach Paper to the Eleventh Five Year Plan[94] divides the discussion on education into five segments – elementary education, secondary education, technical/vocational education and skill development, higher/technical education and adult literacy. Adult literacy is slightly different. But the other four don't represent neat water-tight compartments, in the sense that education is a continuum and one category spills over into another. In 2011, 19.4 million of Jharkhand's population is estimated to be in the 15-59 age-group and this will increase to 22.9 million in 2021.[95] Few of them have benefitted either from formally imparted higher education or skills. As has been mentioned earlier, there are problems with literacy and these have

[94] *Towards Faster and More Inclusive Growth, An Approach to the 11th Five Year Plan*, Planning Commission, Government of India, December 2006, http://planningcommission.nic.in/plans/planrel/app11_16jan.pdf

[95] Indicus estimates.

variations among districts and within districts. Though the SSA has led to an increase in school enrollments, particularly at the primary school level, there are high drop-out rates and transition to secondary levels is low. Even when there are schools and teachers, the quality of education imparted is low. NUEPA (National University of Educational Planning and Administration) has an educational development indicator based on access, infrastructure, teachers and outcomes. When 35 States were ranked by NUEPA under the EDI in 2007-08, Jharkhand was ranked 33rd, just ahead of Arunachal Pradesh and Bihar and this was for elementary schools alone.[96] Pratham's Annual Status of Education Report (ASER) 2010 gives some idea of what one is up against. These numbers are for rural Jharkhand alone and are based on a survey, not a census.[97] 85.4% of children in the 6-14 age-group are enrolled in a government school. But the time it comes to the 15-16 age-group, the share drops to 69.5%. Thus, in rural areas, government schools still remain the main medium for delivering education, though the importance declines as one moves up the education ladder. School enrollment has increased sharply, including for girls, and in the 6-14 age-group, only 3.8% of children are out of school. But by the time it comes to the 15-16 age-group, this number increases to 15.7%. The quality of teaching also leaves a lot to be desired. For example, "In Std III, 6.3% children cannot even read letters, 21.7% can read letters but not more, 32.9% can read words but not Std 1 text or higher, 26.3% can read Std 1 text but not Std 2 level text, and 12.8% can read Std 2 level text", "In Std 3, 5.9% children cannot even recognize numbers 1-9, 24.2% can recognize numbers up to 10 but not more, 36.8% can recognize numbers up to 100 but cannot do subtraction, 23% can do subtraction but not division, and 10% can do division" and so on.[98]

8.1.3 Some points are obvious and have been talked about ad nauseam. First, there are district-level variations and the problem is worst in districts like Chaibasa, Deoghar, Godda, Jamatara, Latehar and Pakur. Second, there are still some habitations that do not have primary schools within the prescribed distance of 1 km and even more that do not have upper primary schools within the prescribed distance of 3 km. Third, a large number of schools are still single-teacher schools, with multi-grade teaching. Fourth, SSA grants for maintenance, development or teachers do not flow on time. Fifth, there is still a lack of women teachers and toilets for girls. Sixth, in general, infrastructure (buildings, playgrounds, walls, drinking water facilities, toilets, teaching material, libraries) is still unsatisfactory. These are supply-side issues and become more serious when it comes to transition to secondary education, though the Rashtriya Madhyamika Shiksha Abhiyan does provide funds. There are clearly also problems of quality, reflected both in low transition rates and in the fact that

[96] http://www.dise.in/Downloads/Publications/Publications%202007-08/AR0708/Teacher%20Related%20Indicators%20&%20EDI.pdf
[97] http://images2.asercentre.org/aserreports/JHARKHAND_2010.pdf
[98] *Ibid.*

many enrolled children are not present in school on the day a survey is held. If demand can be stimulated, household work or opportunity costs of lost income are not very convincing explanations for non-presence. These problems become more serious because of the Right to Education Act. There is a good case for setting up a State Institute of Educational Planning and Administration, independent of the Jharkhand Council for Educational Research and Training (JCERT).

Table 8.1: Gross Enrolment rate among major states, 2007-08

	Primary	Middle	Combined
States\Age Groups	6-11 yrs	(11-13 yrs)	(6-13 yrs)
Andhra Pradesh	95.5	77.3	88.3
Bihar	104.4	46.2	82.6
Chhattisgarh	125.5	89.8	112.2
Himachal Pradesh	111.7	114.3	112.7
Jharkhand	153.9	62.2	119.1
Maharashtra	101.8	86.8	96.1
Orissa	117.0	80.2	102.7
Punjab	92.8	69.1	83.6
Tamil Nadu	116.1	112.7	114.8
Uttarakhand	119.4	92.8	109.3
West Bengal	112.9	71.2	96.7
India	114.0	78.1	100.3

Source: Selected Education Statistics, Ministry of Human Resource Development

8.1.4 Both the EGS and ALCs (Alternative Learning Centres) are half-way houses. They are not full-fledged schools. But the idea has been accepted, since it is known that they will transit to full-fledged schools eventually. Consequently, provided it is handled carefully, it should be possible to push the para-teacher idea more, though there will be some complaints about downgrading of quality. For example, Rajasthan has used the Shiksha Karmi Project since 1987 in remote and relatively inaccessible socio-economically backward villages, where government primary schools are non-existent. Himachal Pradesh has also used para-teachers of two types. Some are members of the local community and work with out-of-school children. Others are para-professionals and are paid lower salaries than regular government school teachers. Once there is community participation and community demand is generated, these can graduate upwards, as was done with the Education Guarantee Scheme in Madhya Pradesh, Lok Jumbish in Rajasthan and Aamchi Shala in

Maharashtra. Community management improves quality and makes teachers accountable. It also tends to fuel demand for education. In passing, this is equally true of ICDS. The impression one forms is that Anganwadi workers are more or less present everywhere. However, there are complaints about the quality of food and quality of pre-school education imparted. Both should improve with community participation. More importantly, private schools exist in relatively backward and rural areas. There is no obvious evidence of market failure, except in very backward villages and blocks. Hence, one should examine the licensing and regulatory constraints that inhibit the setting up of private schools and encourage public schools to be handed over to the private sector for management. Once children are enrolled in primary school, the demand for better quality secondary education will emerge a few years down the line. Therefore, similar principles to upgrade the quality of secondary education should consciously be on the agenda. There is a premium on acquisition of English language skills and surveys show that, everything else remaining constant, the average wage/salary increases by around 25% because of basic familiarity with the English language alone. Therefore, particularly beyond Standard VIII, there should be a conscious attempt to encourage English-medium schools, or schools that teach English, in every block.

8.1.5 Jharkhand has never exhibited market failure in higher/technical education. This does not only mean specialized and technical institutes, such as those in engineering, medical or management education. This is equally true of colleges. Central Universities, IIMs or National Law Universities are a different matter. But that apart, it is not very obvious why the State should spend scarce resources on setting up universities like Ranchi University, Birsa Agricultural University, Siddhu Kanhu University, Kolhan University, Vinoba Bhave University, Nilambar Pitambar University, or even model colleges. In any event, these universities have affiliating colleges that were private ones to start off with. Having been set up, these universities are starved of funds, both capital and recurrent. Instead, there should be a State-level Private Universities Act that allows private universities to be set up, with appropriate regulatory and disclosure norms. The suggestion is not that these existing universities should be closed down. Instead, they should be gradually transformed into regulatory and affiliating bodies, without teaching functions.

8.1.6 The skills deficit in India has been flagged several times. The following drive home the point.[99] 80% of new entrants into the work force have no opportunities for development of skills. While there are 12.8 million new entrants into the work force every year, the existing training capacity is 3.1 million per year. In both rural and urban India, and for both males and females, attendance rates in educational

[99] *Eleventh Five Year Plan, 2007-2012, Vol. I, Inclusive Growth*, Planning Commission, Government of India and Oxford University Press, 2008.These numbers are based on the 61st round (2004-05) of the NSS.

institutions drop by around 50% in the age group of 15-19 years.[100] Simultaneously, labour force participation rates begin to increase in the age group of 15-19 years and by the time it comes to the age group of 25-29 years, it is 95.0% for rural males and 94.4% for urban males. The figures for females are lower at 36.5% in rural India and 22.1% in urban India. The 15-29 age-group can be used as an illustration. Since post-educational institution training opportunities are limited, 87.8% of the population in this bracket has had no vocational training.[101] Of the 11.3% who received vocational training, only 1.3% received formal vocational training.[102] Most of the skills deficit is a problem that plagues the unorganized/informal sector. While there are alternative definitions of unorganized or informal, it is unnecessary to go into those definitional problems here.[103] But it is necessary to remember that there can be workers apparently employed in the organized/formal sector, who are on informal contracts. They too are therefore unorganized/informal. In general, the organized sector has higher levels of skills than the unorganized sector and regular workers perform better than casual workers. It is worth making the point that education is not the same as skills formation, with the latter developed through some form of vocational education (VE). Education does not necessarily lead to the development of marketable skills. However, education does provide a general template and makes it easier to access both formal and informal VE.

8.1.7 In 2004-05, NSSO (National Sample Survey Organization) asked a question about the skill profile of the youth, defined as those between 15 and 29 years. Skills were defined as informal (both hereditary and others) and formal, formal vocational training interpreted as one where there was a structured training programme leading to a recognized certificate, diploma or degree. Understandably, formal training was higher in urban than in rural areas. However, informal skill acquisition was evenly spread across urban and rural areas. For youth, the 2004-05 survey brings out inter-State differences starkly. This is shown in Table 8.2. Amongst the youth, most of those with formal training are in Kerala, Maharashtra, Tamil Nadu, Himachal Pradesh and Gujarat. Not surprisingly, Jharkhand's share is on the low side. A better indicator of the State's performance is the share of the young population that has some variety of formal training. In this, Maharashtra, Kerala, Tamil Nadu, Gujarat and Andhra Pradesh perform well and Jharkhand again performs badly. Is this because there is better training capacity and infrastructure? Is it because industrial activity exists in these States? Is it because there is a positive correlation between some minimum level of educational attainment and acquisition of formal training? The answer is probably a combination of various factors.

[100] The drop is sharper for rural females and is higher in rural than in urban India.
[101] 85.5% for males and 90.2% for females. Understandably, the numbers without training are higher in rural areas.
[102] The number is higher for males and higher in urban than in rural areas.
[103] See, *Report on Conditions of Work and Promotion of Livelihoods in the Unorganized Sector*, National Commission for Enterprises in the Unorganized Sector (NCEUS), August 2007.

Table 8.2: Inter-State variations in skill formation among youth, 15-24

State	Share of State in those with formal training (%)	% youth in State with formal training
Jammu & Kashmir	0.4	2
Himachal Pradesh	1	5.6
Punjab	2.8	4.1
Uttarakhand	0.8	3.9
Haryana	2.8	4.5
Delhi	1.7	4.1
Rajasthan	2.5	1.7
Uttar Pradesh	6.9	1.7
Bihar	0.8	0.5
Assam	0.8	1.4
West Bengal	6.9	3.2
Jharkhand	0.8	1.3
Orissa	1.9	1.9
Chhattisgarh	2	3.5
Madhya Pradesh	3.4	2.2
Gujarat	6.6	4.7
Maharashtra	21.7	8.3
Andhra Pradesh	6.6	3.2
Karnataka	4.6	3.1
Kerala	12.2	15.5
Tamil Nadu	11.3	7.6
North-East	0.4	1.3
Union Territories	1.3	12.6

Source: India Labour Report 2009

8.1.8 Where will these skills be needed? At an all-India level, there is some tentative identification of where these skill needs are going to be. For instance, within the services category, Planning Commission[104] identifies the following for high growth and employment – IT-enabled services, telecom services, tourism, transport services, health-care, education and training, real estate and ownership of dwellings, banking and financial services, insurance, retail services and media and entertainment services. Other sectors mentioned are energy production, distribution and

[104] *Ibid.*

consumption, floriculture, construction of buildings and construction of infrastructure projects. Within industry groups are automotives, food, chemicals, basic metals, non-metallic minerals, plastic and plastic processing, leather, rubber, wood and bamboo, gems and jewellery and handicrafts, handlooms and khadi and village industries. In a separate identification from the point of view of demand for skills, there is mention of 20 sectors – automobiles and auto-components, banking/insurance and financial services, building and construction, chemicals and pharmaceuticals, construction materials/building hardware, educational and skill development services, electronics hardware, food processing/cold chain/refrigeration, furniture and furnishings, gems and jewellery, health-care services, ITES or BPO, ITS or software services, leather and leather goods, media, entertainment, broadcasting, content creation and animation, organized retail, real estate services, textiles and garments, tourism, hospitality and travel trade and transportation, logistics, warehousing and packaging. In the Jharkhand context, an analysis by NCEUS may be more pertinent.[105] "Broadly speaking, at the high end of the workforce, we have segments requiring high levels of general education and/or technical education. Our primary focus is on segments of the workforce which have comparatively low levels of education, and which are currently with or without (formal/non-formal) skills. Among these segments, those with a fairly high incidence of skills (predominantly non-formal) and rapid growth of employment are clearly those on which formal training initiatives would need to focus. Our analysis identifies the following trades on a prima facie basis as those in which an intensive effort to expand training would be required: Construction Workers, Stone Cutter; Salesmen, Shop Assistants; Transport Equipment Operators; Tailors, Dress-makers, Sewers, Upholsterers; Carpenters, Cabinet and Wood; Tobacco Preparers, Tobacco Product Makers; Hair Dresser, Barber, Beautician; House Keeper, Matron, Steward, Cooks, Waiters, Bartenders; Stationary Engine Operators, Equipment Operators, Material Handling, Loaders; Plumber, Welder, Sheet Metal, Structural, Metal Preparers, Erectors; Painting; Arts and Journalists. There are other sectors/segments which are also growing rapidly but where current levels of training are low. Examples of these trades are: Professional Workers; Building Caretaker, House keeping Services; Cleaning services." Jharkhand's Skill Development Mission should quickly identify the skill gaps in different geographical areas. Quality issues apart, these are not necessarily the skills being imparted today. And this also has a bearing on the modes through which skill development will take place. Certain elements are obvious enough. For example, one should introduce vocational education in schools, especially beyond Standard VIII. ITI-s should be upgraded and extended to areas where they are absent, with perhaps a polytechnic in every sub-division, expanding the present PPP initiatives. There should be some kind of Skill Development Centre

[105] *Ibid.*

(SDC), if not in every block, at least in every district. However, to ensure placement, these should be done with the involvement of the private sector, such as in the PPP mode, and not by the government alone. At best, there can be one-time capital grants to private institutions and stipends or fee subsidization for SC/ST/OBCs and BPL students. Existing public sector infrastructure can also be handed over to the private sector for management.

8.1.9 However, it must also be recognized that there are several layers in the skills problem. Nor are there clear answers as to the superiority, or otherwise, of public-delivery vis-à-vis private delivery.[106] There are public-private partnership models in several countries in Europe. In Japan, training is essentially provided through the enterprise, whereas in East Asia, delivery is fundamentally public. At the other end, in Britain and USA, delivery is primarily private. Vocational education through schools works well in USA, Sweden, France, South Korea and Taiwan. As has been mentioned earlier, formal employment is low in India, particularly so in a State like Jharkhand and several parallel systems co-exist - the formal public (government) training system, public training that caters to the informal sector, the non-government (both private and NGO) network of formal training institutions and the non-government (primarily NGO-driven) system of informal training. In the first category one has vocational education through schools[107], polytechnics through the Ministry of Human Resource Development, the Craftsmen Training Scheme and the Apprenticeship Training Scheme through the Directorate General for Employment and Training under the Ministry of Labour and Employment. The plans to expand public capacity under the "National Skill Development Policy" are essentially under this segment. In the second segment of public training that caters to the informal sector, one has community polytechnics run by the Ministry of Human Resource Development, the Jan Shikshan Sansthan (JSS) for disadvantaged adults,[108] the National Institute of Open Schooling (NIOS), Ministry of Labour and Employment's Skill Development Initiative,[109] Ministry of Micro, Small and Medium Enterprises' entrepreneurship development programmes and entrepreneurship skill development programmes, Prime Minister's Rozgar Yojana (PMRY),[110] the Swarna Jayanti Shahari Rojgar Yojana (SJSRY),[111] the Swarnajayanti Gram Swarozgar Yojana (SGSY)[112] and Department of Rural Development's RUDSETIs (Rural Development

[106] See the discussion in, *Improving Technical Education and Vocational Training, Strategies for Asia*, Asian Development Bank, 2004.
[107] Especially +2 in secondary schools. A centrally sponsored scheme has existed since 1988. Such training is followed by apprentice training under the Apprenticeship Act.
[108] This can be implemented by NGOs.
[109] This was started in 2007.
[110] This was started in 1993 and has an element of training for self-employed entrepreneurs.
[111] This was started in 1997 and has an element of training in urban areas. It has two separate components for self-employment and wage employment.
[112] This also has a training component.

and Self-Employment Training Institutes).[113] Ministry of Textiles, Development Commissioner (Handicrafts), Ministry of Youth Affairs and Sports, Ministry of Women and Child Development, Department of Science and Technology, Ministry of Agriculture, Ministry of Health and Family Welfare, Ministry of Tourism, Ministry of Food Processing, Ministry of Social Justice and Empowerment and Ministry of Minority Affairs also have small programmes with some skill development components. Some programmes introduced by States like Andhra Pradesh, Rajasthan, Tripura, Maharashtra, Orissa and Jammu and Kashmir can also be included in the second segment of public training that caters to the informal sector. Jharkhand doesn't have these yet and there is a gap. There are several different categories that fit into the third segment of private networks of formal training institutions – for-profit training centres or institutes, training for employment within one's own enterprise, training delivery and finance in partnership with public agencies and foundations with a developmental agenda, as part of corporate social responsibility (CSR). There are several examples in each category.

8.1.10 There can be skills deficits that are structural in nature. These require candidates to go through longer-duration training. In other instances, shorter-duration interventions will work. And in the last category, all that is required is last-mile unemployability. We should also mention the question of matching labour supply to labour demand, something that employment exchanges were supposed to do. Unorganized sector male wage employment is primarily in manufacturing, construction, trading and transport. How do these workers find out jobs are available and decide on temporary or permanent migration? The answer is simple. Barring limited instances of job offers at factory gates, there are only two channels: informal (family, caste, community) networks and labour contractors. This kind of information dissemination cannot be efficient, apart from commissions, exploitative or otherwise, paid to agents. Other than such dis-intermediation and information dissemination being inefficient, there can be no question of skill formation if recruitment is through such informal channels. Clearly, one needs efficient clearing houses that match supply and demand. Employment exchanges have failed to do this successfully in every State, including Jharkhand. They have succeeded in a very limited way with jobs for the private sector and increasingly less with jobs for the public sector. For the private sector, the mandatory requirement of recruitment through employment exchanges only applies below a threshold level of wages and these have not been revised for years. Whatever the law may say *de jure*, there is nothing mandatory about employment exchanges *de facto*. For the public sector, a

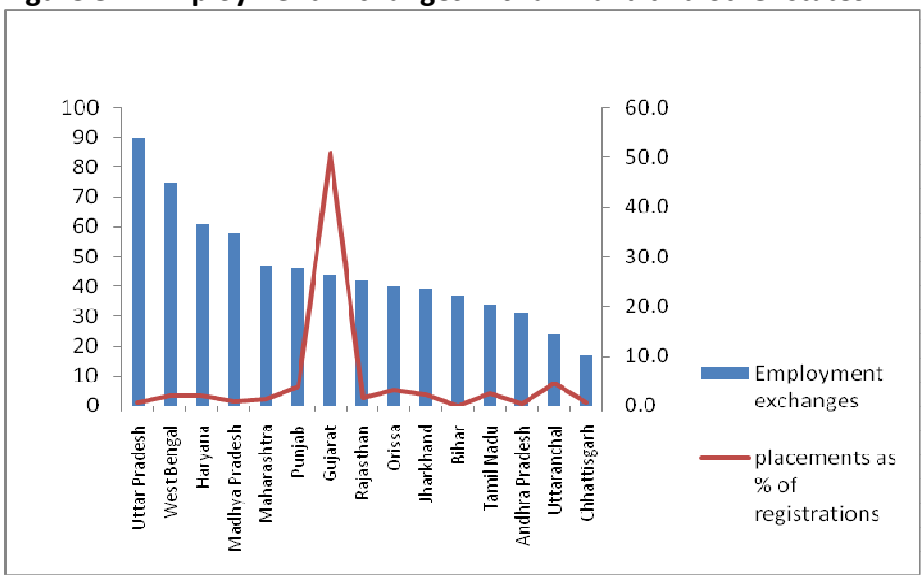
[113] The first RUDSETI was set up in Karnataka in 1982. Ministry of Rural Development also has pilots in partnership with IL&FS.

Supreme Court judgement in 1996 said that appointments no longer had to be from the pool that was registered with employment exchanges, as long as job vacancies were suitably publicized. The public sector also set up channels like Staff Selection Commissions, Banking Service Commissions and Railway Recruitment Boards. Administration and expenditure on employment exchanges are now State subjects, an earlier matching grant from the Centre having run its course in 1969. So there should be a cost-benefit analysis of the employment exchanges that are located in every district of Jharkhand. Do placements justify the expenditure on them? Some States have experimented with reforming employment exchanges. States like Gujarat[114] and Rajasthan[115] have experimented with allowing private placement agencies to get into the matching function. Even a State like West Bengal has permitted private training organizations to offer training at employment exchanges. While it is early days yet, there is thus reason to be skeptical about the Employment Exchanges Mission Mode Project (EEMMP), despite it allowing for private sector participation. If nothing else, employment exchanges tend to be urban-centric. The "job" or *rojgar mela*s in Rajasthan have been far more successful in offering placements than employment exchanges. While Jharkhand has already successfully experimented with such *mela*s, their use needs to be up-scaled. In any event, each of these options should be used.

[114] These are called *Rozgar Sahay Kendra*s in Gujarat, labeled as public-private partnerships. The public employment exchange provides a database of people on the register (the supply of labour, so to speak) and the private agency matches it with demand.

[115] Job "*melas*" have been organized in Rajasthan.

Figure 8.1: Employment Exchanges in Jharkhand and other states



Source: Directorate General of Employment and Training, Ministry of Labour

8.1.11 One should also tap the National Skill Development Corporation (NSDC) much more.[116] This has the added advantage that vocational training providers funded by NSDC have to demonstrate increases in income (through wage or self-employment) that can be monitored and quantified, before they become eligible for funding through NSDC. A few existing NSDC partners have already exhibited interest in Jharkhand. EMPOWER, Gram Tarang, Indian Society of Healthcare Professionals and Indigram are examples. This needs to supplement present PPP schemes in revamping ITI-s.

8.1.12 There are back the envelope numbers that 300,000 women from Jharkhand are employed elsewhere in India, especially in the Northern Capital Region, for domestic work. Some of them fall victims to trafficking and several of them may be otherwise exploited. At the Central government level, there has been talk of enacting legislation for protecting the rights of domestic workers. Simultaneously, though on not a very large scale yet, there has been in-migration from Bangladesh, especially through districts like Sahibganj and Pakur. These are not very far from the Bangladesh border, though it is difficult to target immigration from Bangladesh specifically, since it is routed through West Bengal. Potentially, this in-migration can alter socio-economic and demographic profiles, as they have in Assam, Tripura and West Bengal. Immigration from Bangladesh has to be addressed at the Central government level, and there is little the State government can do to address the problem. However, both the out-migration and in-migration are done through informal and unorganized networks, though some of these intermediaries are

[116] http://www.nsdcindia.org/index.aspx

registered under the Shops and Establishments Act. This registration can be strengthened and some quality norms enforced for intermediaries. While one cannot mandatorily insist that out-migration and in-migration must be through registered intermediaries, one can incentivize this process. For example, if outmigration occurs through registered organizations, workers who are stranded elsewhere in the country will be repatriated at the State government's cost, or offered social security while they are temporarily without a job. Similar incentives can also be offered for in-migration. In-migration sometimes occurs seasonally. If there is some kind of registration system, there might be an incentive for in-migrants from Bangladesh (West Bengal) to return to their States of origin. Without registration, the seasonal in-migration is liable to become permanent.

Section 8.2: Increasing the Efficiency of Inputs – Land

8.2.1 Jharkhand's poverty and under-employment is mostly (though not completely) a rural sector problem. "Agriculture is the main stay for the 80% of rural population of the state. Agriculture is their employment and primary income generating activity. The agricultural economy of the Jharkhand state is characterized by dependence on nature, low investment, low productivity, mono-cropping with paddy as the dominant crop, inadequate irrigation facilities and small ands marginal holdings. The dependence of agriculture on the vagaries of the rain-god can be gauged from the fact that as much as 92% of the total cultivated area is un-irrigated."[117] Rural/urban has a Census definition and rural is often equated with earning a living from agriculture, though that need not strictly speaking be true, particularly if off-farm employment opportunities can be encouraged in rural areas. But as of now, the rural sector means subsistence-level low-productivity agriculture. There is limited irrigation. Land is subject to erosion and is lying waste. Rain-fed agriculture primarily means rice. The broad template of agricultural reform is known. There are issues like allowing corporate sector involvement in agriculture, removal of government imposed restrictions on production, marketing and distribution, refocus of public expenditure away from input subsidies to infrastructure and extension services, dis-intermediation of distribution chains, forward markets, contract farming, revamping credit and insurance, and freeing up of land markets. All these are linked to encouraging commercialization and diversification. This is in addition to the point made about creating off-farm employment opportunities. These are all valid arguments, in the long-term and the point about increasing irrigation is also well taken. Other than irrigation and diversification (pulses, oilseeds, coarse

[117] http://jharkhand.gov.in/New_Depts/agric/agri_fr.html

cereals), prescriptions about boosting agricultural yields and income have tended to focus on technology (fertilizers, chemicals, seeds).[118]

8.2.2 These are unexceptionable arguments, but they only yield pay-offs in the longer run. That apart, the Indian track record on pulses, oilseeds or coarse cereals isn't particularly strong. It is also worth bearing in mind some figures. At an all-India level, the per hectare value of output in 2007-08 was Rs 13,061 for pulses, Rs 19,498 for cereals, Rs 25,901 for cereals and Rs 122,657 for fruits and vegetables.[119] Gujarat's agricultural performance, especially since 2000, has often been commented upon and one particular paper that analyzes it is often cited.[120] Gujarat's agriculture has grown at more than 9.6% since 2000 and this paper identifies the reasons for this performance. "Cotton, the high value segment (livestock, fruits and vegetables) and wheat are identified as the main sources of growth as they have grown rapidly both in production and value terms. Private sector has driven the cotton boom; but public sector has also played an important role. Besides favorable monsoons in the past few years and past investment in rural roads, active role of public sector through [a] mass based water harvesting and groundwater recharge; [b] reform of rural power system through Jyotigram Scheme; [c] reform of agricultural marketing institutions; [d] revitalized and reinvented agricultural extension system are among the factors that have contributed to Gujarat's impressive performance in agriculture." Cotton and wheat may be irrelevant for Jharkhand, but livestock, fruits and vegetables are relevant. The moral of the Gujarat story thus is - rural roads, water harvesting and groundwater recharge, rural power, agricultural marketing and extension services can drive high rates of growth. Some of these issues (roads, water, power) have been addressed in earlier sections, the point being that while those long term reforms remain on the agenda, limited reforms can also yield significant results in the short-run. "Gujarat has slowly followed suit as it one of the few states to have implemented reforms to the Model Act 2003 and all amendments to the Agricultural Produce Marketing Committee (APMC) Act in 2007 allowing direct marketing, contract farming and markets in private/co-operative sectors…But be it a cooperative or private-sector led model, linking farmers to markets is crucial to promote agricultural growth and raise farmers' incomes…The corporate sector can play an important role by setting up back end operations like rural service hubs which supply inputs and extension services to farmers ….Farmers can also come together in farmers cooperatives, companies or clubs to reduce the transaction cost of doing business and also correct the balance of power within the stakeholders (organized retailers, processors and

[118] See, *Jharkhand: Addressing the Challenge of Inclusive Development*, World Bank, 2007 and *Report of the Committee Constituted to Review and Look Into All Aspects of the Development of Jharkhand*, Institute for Human Development, September 2009.

[119] *Mid-Term Appraisal of the Eleventh Five Year Plan.*

[120] "Agriculture Performance in Gujarat Since 2000," Ashok Gulati, Tushaar Shah and Ganga Sreedhar, International Water Management Institute and International Food Policy Research Institute, May 2009.

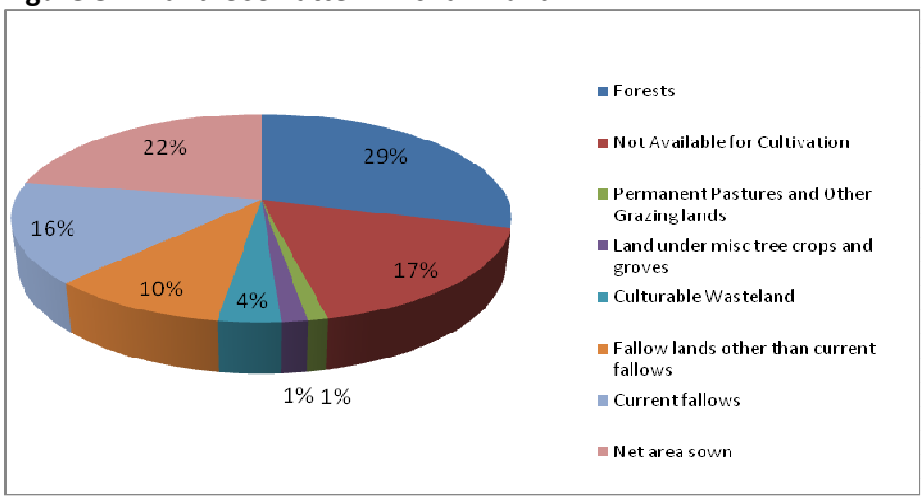
farmers) in negotiating the terms of doing business…The state government has also worked with various institutions like state agricultural universities, NGOs/civil society organizations and companies in bridging the knowledge gap i.e. making agricultural technology and know-how available to farmers."[121]

8.2.3 Jharkhand's APMC Act was passed in 2008. Contract farming is not the same as corporate farming and this amended APMC Act still doesn't allow for the creation of alternative marketing channels. Nor is it obvious that the 2% market fee presently collected will be used in the development of marketing-related infrastructure. There are 55 registered markets in Ranchi, 8 in Jamshedpur, 22 in Eastern Singhbhum, 21 in Dhanbad, 15 in Hazaribagh, 15 in Ramgarh, 29 in Palamu, 19 in Giridih, 37 in Garhwa, 14 in Deoghar, 37 in Gumla, 76 in Simdega, 11 in Lohardaga, 12 in Koderma, 16 in Saraikela, 28 in Godda, 19 in Khunti, 2 in Bokaro, 33 in Sahebganj, 17 in Latehar, 5 in Jamtara, 22 in Pakur, 26 in Chatra, 27 in Western Singhbhum and 24 in Dumka.[122] That is a total of 575 major *haat*s are there are many more that are minor ones. The World Bank figure has been mentioned earlier, that access to wholesale markets increases a household's income by 40%, since it collapses the distribution chain. First, these *haats* should be upgraded. Since these *haats* operate during the day and very basic infrastructure is needed (sheds, roads, basic processing, water, toilets, cleaning, garbage collection), not more than Rs 1 crore will be required to upgrade such a *haat* and the average figure will be even lower, at around Rs 25 lakhs. This can be dovetailed with the model village scheme or the upgradation of panchayats mentioned earlier. It must of course be remembered that not all of these *haats* are located on public land. Second, and more importantly, channels must also be found outside the traditional *haat*s governed by the APMC system. For instance, Andhra Pradesh has a system of Rythu Bazars that operate outside APMC Committees and provide direct links between consumers and farmers, eliminating middlemen, though prices need not be administratively fixed (as it is in Andhra). These are located on government land and infrastructure is constructed using funds collected by APMC Committees. Tamil Nadu and Orissa have also replicated this experiment. It is also possible to think of subsidized loans to SHGs or cooperatives to purchase vehicles for transporting produce to such markets.

[121] *Ibid.*

[122] It is not certain that this count is exact.

Figure 8.2: Land Use Pattern in Jharkhand



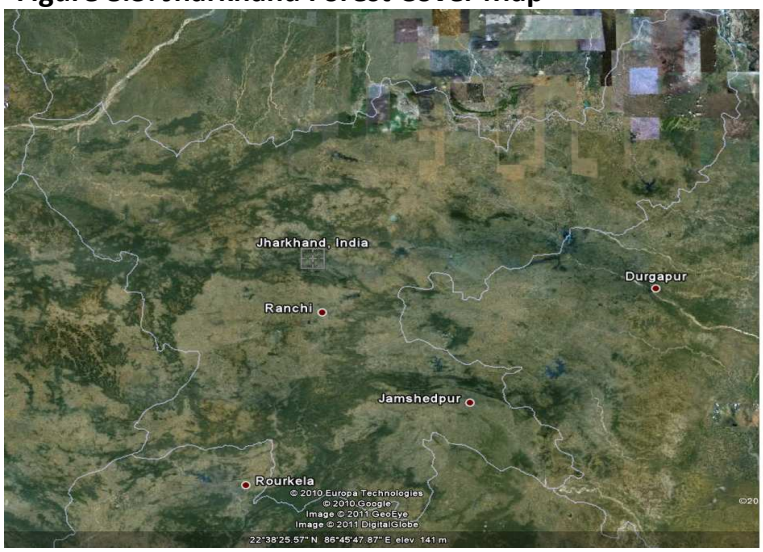
Source: Land Use Statistics, Ministry of Agriculture, GOI, 2006

8.2.4 Land has become an issue because of the threat of alienation. There is a figure that 9.63 lakh people have been displaced between 1951 and 1995.[123] If planned projects are included, the figure increases to 13.41 lakhs. As has been mentioned earlier, resentment towards land acquisition typically results from lack of skills and a sense that alternative employment opportunities will not be available. There is a Jharkhand Rehabilitation and Resettlement Policy of 2008. On the face of it, this ought to address the resentment, important for generating incomes and employment from forests, mines and the development of industries. However, a few comments are in order. First, the policy itself should be scrutinized again. For example, for purposes of counting as a separate family, there is a clause that states, "unmarried men or unmarried women of more than 30 years of age". Is 30 years the right cut-off? Second, compensation is applicable to those who are within the "affected area", though periphery development encompasses a geographical area that is 15 km around the project site. There is thus implicit recognition that negative externalities can also impact livelihoods outside the project site. Coal mining is a case in point. Thus, should compensation also be extended to those who are outside the project site, but inside the periphery? Third, historically, social impact assessments have not taken place and a policy is as good as its enforcement. Details of land acquisition, compensation payments and rehabilitation by CCL, BCCL, ECL and even HEC are not readily available. Nor is it obvious that these have strictly adhered to areas demarcated on their leases, though GPS methods should now make it possible to pin these down. Fourth, the broad legal provisions are the Chotanagpur Tenancy Act (CNTA), the Santhal Parganas Tenancy Act (SPTA), the Land Acquisition Act (LAA) and the Scheduled Area Regulation (SAR). In different ways, CNTA and SPTA restrict transfers, though CNTA is more liberal. Without diluting the non-

[123] "Alienation and Restoration of Tribal Land in Jharkhand," Ramesh Sharan, in Nandini Sundar edited, *Legal Grounds, Natural Resources, Identity, and the Law in Jharkhand*, Oxford University Press, 2009.

transfer provisions, CNTA and SPTA should be reviewed. A detailed analysis is not required for present purposes. But, for example, why should a raiyat be constrained under various provisions of Section 21 of CNTA? Why, under Section 46 of CNTA, should ST to ST transfers only be restricted to the same police station? Should alienation of "Bhuinhari" lands be allowed? And so on. Laws need to evolve over time. Consequently, it is recommended that CNTA and SPTA should be reviewed, from the perspective of protecting the interests of STs. Fifth, the SAR process should be improved, so that alienated lands (other than those through land acquisition for public purposes) are restored. Sixth, land records need to be updated, modernized and computerized, so that there is a complete sense of land that is owned by the government. This is especially important for common lands, since most waste and fallow land seems to belong to this category. If such common lands are under private cultivation, one should not regard them as encroachments and might as well grant titles. Titles incentivize people to invest in improving the quality of land. Seventh, one should be somewhat careful about corporate demands for land acquisition. Demands are often far in excess of what the project requires. Eighth, outside of SPTA areas, it is by no means obvious that government intervention through LAA is required. There is plenty of "raiyat" land and this can be privately acquired. For example, the Abhijeet group has privately acquired land for its power plant in Chandwa block in Latehar. Ninth, Jharkhand has not had a consolidation exercise, unlike those that have been attempted in Punjab, Haryana or the western parts of UP. Consolidation helps merge small land-holdings and exploits economies of scale. Bihar and Orissa have also begun to contemplate land consolidation. Tenth, outside ownership laws and given those constraints, it is possible to open up markets for tenancy and leasing.

Figure 8.3: Jharkhand Forest Cover Map



Source: Googlemaps

Section 8.3: Increasing the Efficient of Inputs – Forests

8.3.1 It shouldn't be too difficult now to diffuse the resentment over forests. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act was passed in 2006 and this empowers communities to manage, protect and conserve forests. There should be free access for collection of non-timber forest produce (NTFP). The PESA Act has also been operational since 1996. There are districts where agricultural development is difficult. Garhwa, Palamu, Hazaribagh, Koderma and East Singhbhum are examples. However, NTFP (Kendu leaf, tamarind, mahua, saal, dori, kusum, karanj, jamun, chiraunji, harra, amla, bahera, chiraita, bamboo, palash) offer prospects for value addition and marketing, particularly if processing and value addition takes place within Jharkhand. However, there are a few problems. First, marketing of NTFP was nationalized through the Jharkhand Forest Development Corporation (JFDC) until as recently as January 2007 and this has left legacies. Second, under the Forest Conservation Act, tribals have usually been looked upon as encroachers, even if the law does not quite say that, and that mindset remains, reflected in other statutes and rules that need to be overhauled after the Recognition of Forest Rights Act and PESA. Even if Recognition of Forest Rights Act and PESA have overriding power over other statutes and rules, it is important to overhaul those other statutes and rules as a signal. Rules for the transfer of minor forest produce to PRIs need to be immediately notified. Laws and rules like the Bihar Forest Produce (Regulation of Trade) Act of 1984 and its rules, the Bihar Private Forest Act of 1947 and its rules and the manual of Bihar Forest Laws need overhaul. Restrictions on transit are just as important as those that nationalize and these must also be urgently changed. Third, the entire exercise of JFM (Joint Forest Management) comes into question. However, the simple message is the following. If there is one area where one can easily remove controls, ensure participation and diffuse resentment, this is in the area of forests.

Section 8.4: Increasing the Efficiency of Inputs – Mines

8.4.1 It is undeniable that the mining sector has a lot of potential. But there are well known barriers – (1) delays in obtaining mining approvals and clearances; (2) infrastructural limitations (power, transport); (3) barriers to private sector entry (such as in coal); and (4) input limitations (power, coking coal). The World Bank's afore-mentioned report on Jharkhand also mentions these in a slightly different language.[124] "Successful mining laws need to be designed to: (i) minimize corruption and rent-seeking, as well as the duration of the permit process, by eliminating

[124] World Bank, *ibid.*

discretion in the implementation of the law; (ii) reduce speculation and encourage active exploration, by the use of properly structured license fees, which also serve to finance an independent and efficient mining cadastre; and (iii) provide environmental and social safeguards and rehabilitation". While some of these are Central government subjects (coal), the World Bank also flags the Jharkhand State Mineral Development Corporation's conflict of interest as a regulator and as an operator.

8.4.2 Mining is not simply about extraction of a natural resource from beneath the ground. It involves two principal challenges – contained and mitigated damage to the environment, especially the critical ecosystems of local areas and being more acceptable to society, including development of the people directly affected. On both counts, the mining sector has been a failure. Mining in Jharkhand has no doubt led to forest degradation, significantly depleting the ecosystem and rendering the tribal and local population more vulnerable socially and economically, as they have been impacted in a disproportionately greater way. As a result, today, the mining sector is under tremendous pressure, partly also because it needs to undo the damaging reputation that precedes it. The permission to extract mineral wealth or the permission to mine, which by and large has been in forested areas, and over which the State has had dominion status, has solely been the prerogative of the Government. The question of destroying the habitats of the *adivasis* or the tribals, who been the original inhabitants for centuries has not yet been worthy of much consideration. They did not have to be compensated. They were at best relocated and rehabilitated. And since these tribal inhabitants were already marginalized from the mainstream, their protests hardly made headlines. The LAA mode has little scope to factor in the interests of affected parties. The Mines and Minerals (Regulation and Development) Bill 1957, made the State Governments the owners of minerals located within the respective State boundaries. The Union Government retained the power of granting the prospecting license, as well as the mining lease thereafter, for both major minerals and fuel minerals. The new Mining Bill, currently tabled in Parliament, seeks to transfer this power to the states.

8.4.3 Environmental requirements have now become stringent, with certain areas becoming completely out of bounds. The locals who would be displaced also need to be compensated in far greater ways (the current Bill tabled in Parliament stipulates that the affected displaced people need to be allotted free shares equal to 26% in the company and have to be provided employment and other conditions prescribed under the State's R & R policy). Till such time their claims are unmet, environment/forest clearances are not given and no mining or construction activities are permitted. There has also been talk of 26% of profits being distributed to affected people. For several reasons, this is problematic. If nothing else, profit calculations can be subject to manipulations. Also inefficiencies of the operator

should not unduly punish the affected people. Mining usually means large-scale mining. In the negative sense, mining has negative environment and social impacts in the following ways - Depletion of forest cover and loss of biodiversity; Water pollution and water level depletion; Air Pollution from mining activity /generated waste; and Pollution from non-closure of mines. The Centre divides protected areas into "go" and "no go" areas, with mandatory Environmental Impact Assessment (EIA) studies. One also needs to flag plans for closure of mines, mandatory since 2003, before one can obtain a mining lease, with the exception of coal. Thus, open cast mines have been passed off as water bodies or water harvesting structures and mine closures have become little more than a mere formality. Jharkhand government should immediately map mineral bearing areas and then map "go" and "no go" areas on top of these. However, environmental and forest clearances can also take time and contribute to uncertainty for the private sector. Therefore, Jharkhand needs to be proactive in following the provisions of The Mines and Minerals (Development & Regulation) Act, 2010, tabled in Parliament. Under Section 5 of the Bill, State governments are required to get the forest clearance procedure approved before the invitation of bids. Although there is a lack of clarity in the proposed Bill about whether the obtained clearance will be the first stage of in-principle clearance, or the later stage of full and final clearance, Jharkhand needs to ensure that it is not the former, but the latter. As regards water pollution, there is no regulatory framework in Jharkhand that deals with it, be it surface water or ground water. The government therefore needs to enact laws which protect water catchments from mining areas and limit water use and/or provide for adequate pricing for use of groundwater. Air pollution from mining waste can be limited by following best practices internationally. These include, excavation from a new pit to start only after the first is exhausted, so that excavations from the second pit can refill the first; separating out and managing the top soil to retain its fertility; following safety measures regarding height and slope of overburden dumps; and drainage systems to handle run-offs after rains, etc. Mine closure must be mandatory for all minerals, including coal. The closure plans need to pay attention to the rehabilitation of the workers and communities who were dependent on the mining activity for sustenance. The financial surety that is currently provided for needs to be increased substantially. In other words, the regulation related to mine closure also needs re-drafting.

8.4.4 There are four components around which policies on rehabilitation and reconstruction of livelihoods are formed. These are: (1) Cash Compensation; (2) Alternative Land; (3) Employment; and (4) Self Employment. In the case of Jharkhand, the displaced persons are mostly tribal, for whom displacement is not just about losing their traditional source of habitats and livelihoods. Therefore, rehabilitation is seldom sufficient to enable them cope with the changes brought to their traditional ways of living, lifestyle and livelihood. Both social and economic impoverishment has naturally followed. Cash compensations have been insufficient,

flawed, poorly implemented (plagued by delays and corruption) and thus have failed to re-erect dismantled production systems and replace/reconstruct traditional employment avenues. With lack of financial inclusion for the poor in India, this might not be the preferred option. On the other hand, providing alternative land has remained more on paper, due to the scarcity in the availability of non-wastelands. Alternative employment re-establishes the livelihood and income streams but, since the displaced people have been tribals and therefore largely unskilled, employment opportunities have been few and private sector employers have been more reluctant to guarantee them. Self-employment on the other hand, is entrepreneur-centered small business, supported by micro credit and elements from the rehabilitation packages. These in most cases have failed to generate guaranteed returns equal to a job.

8.4.5 While some references have already been made to the R&R policy, additional comments are in order. There are two models in the R&R policies of West Bengal and Orissa. Since the LAA only looks at the previous highest transaction of a similar piece of land, with some provision for solatium, the cash compensation needs to be increased, with asset value determination based on future anticipated prices. Since skills remains a problem, a provision can also be made in the R&R policy for annual compensation as a regular source of income. The 26% mentioned in the Mines and Minerals (Development & Regulation) Act of 2010 is meant to address this and Section 43(2) states that this is "on account of annual compensation". While displacement is much more than loss of property, landlessness of the oustees needs to be countered as far as possible. This will require creation of productive land banks and lands, perhaps through human-made restoration techniques. Self employment such as facilitating contracts for operating trucks and other equipment is another option. 24 by 7 electricity supply to all areas in the vicinity have also been mentioned. Returning of rehabilitated land after mining is complete in a few years is yet another option.

8.4.6 Many of these aspects are specific to large mines, whereas small and medium scale mines have distinctly different characteristics. Although there is no internationally accepted definition for small mines, the National Institute of Small Mines, Kolkata defines small and medium scale mines based on production limits. It defines small mines as those that produce minerals up to 0.1 Million Tonnes Per Annum (MTPA) and medium scale mines as those that produce minerals between 0.1 to 0.5 MTPA. Other definitions are based on employment levels/level of mechanization, mining area or level of investment. The mining industry in Jharkhand, like elsewhere in the country, is characterized by a large number of small and medium scale mines. However, Jharkhand does not have any official statistics on small or medium scale mines. The Indian Bureau of Mines (IBM) Nagpur, does not monitor them, especially if they are engaged in extracting minor minerals like sand or stone. These small and

medium scale mines are largely unregulated; many are illegal; produce small quantities; are labour intensive in nature; are hardly monitored and records are not kept; they practice little of either environment of mineral conservation; but cumulatively, have a huge potential to bring in sizeable revenue to the state. One of the reasons why these mines are not monitored or regulated and cause significant damage to the environment is that mines that have a lease area of less than 5 hectares (making them small mines) do not need Environmental Impact Assessments (EIA) to be done. And yet, small and medium scale mining is important. They generate considerable employment. They are also not seasonal and are even cost-effective. So they are a source of vital livelihood for the poor people from adjoining areas. Moreover, they are important from the revenue point of view. At the same time it needs to be ensured that they do not damage the environment/ecology in a significant way. Jharkhand should therefore take immediate steps to record the number of such mines and people engaged therein through extensive surveys as well as remote sensing technologies. Next, the government needs to bring the small and medium scale mines under the ambit of a legal framework and then needs to monitor their activities, with the objective of bringing them back into the mainstream. Towards this end, the small and medium scale mines need a separate policy, which besides regulation and monitoring also looks into the aspects of safety, better working conditions for the poor people engaged from the adjoining regions, and imparting education on scientific mining covering both environment and mineral conservation. The policy should also address issues specific to different clusters of small mines. The policy should be strict with illegal mines, as well as under-reporting practices of the value of the mineral. For example, under-reporting of the Fe content enables the iron ore mines to escape with a lower royalty payment. More mines or bringing more mines under regulatory and accounting ambits would naturally increase revenue generation.

Table 8.3: Growth in GSDP from Mining and Allied Activities

Sector	At constant prices	At current prices	Growth rate
	Rs. Lakh		%
1999-00	426,147	426,147	
2000-01	429,725	461,180	0.84%
2001-02	398,648	444,184	-7.23%
2002-03	406,270	540,408	1.91%
2003-04	416,976	554,422	2.64%
2004-05	460,277	657,930	10.38%
2005-06	475,641	740,285	3.34%

Sector	At constant prices	At current prices	Growth rate
2006-07	445,847	735,209	-6.26%
2007-08	448,735	794,780	0.65%
2008-09	451,641	859,177	0.65%

Source: Central Statistical Organization

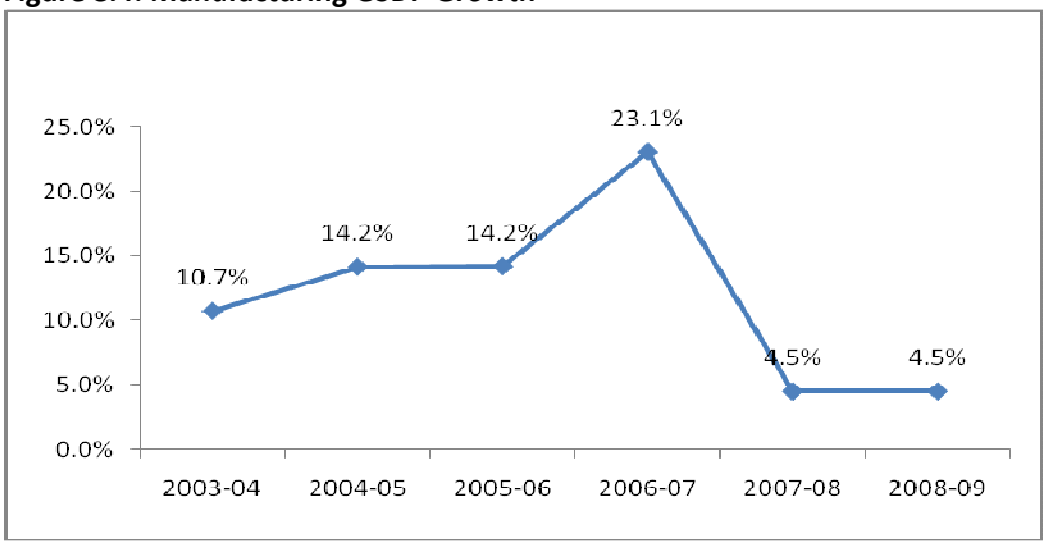
8.4.7 Dead rent and cess are not major contributors to the State exchequer. Dead rent is paid to the State as a charge by the lessee for the area included in the mining lease but from where minerals are not extracted. The charge also depends upon the value of the mineral. The said objective is to create a disincentive for the lessee from keeping the mine idle. Dead rent should be linked to the realization from royalty income, which can enhance the revenue to the exchequer. A cess is levied additionally, usually with an objective like local area development. Jharkhand can introduce such a development cess, taking a leaf out of both West Bengal and Orissa. Royalty is paid, at the mine head, on the quantum of mineral extracted. Of the total revenue generated from mining, royalty generates the maximum revenue. Since 2010, for major metallic minerals like iron ore, the government has moved to a system of *ad valorem* rates, charged on the price at the mine head, rather than a fixed levy. This is the international practice as well. However, the price at the mine-head can be under-reported. Moreover there arises a discrepancy with captive mines that do not sell the extracted mineral, but use it for captive purposes. There is a need to link the market price of the mineral with prices at Metal Exchanges like the London Metal Exchange. For minerals that are not traded in the Metal Exchanges, international prices should be compiled every fortnightly and royalty should be based on that. On captive mines, Jharkhand needs to have a firm policy that irrespective of whether the mine is for captive use or not, the royalty rates should be equal for all. So every fortnight, the average *ad valorem* duty paid for the same mineral by non-captive mines can be charged from the captive mines, and if there arises any differential, then it can be adjusted in the next fortnightly cycle. This way, there is a level playing field ensured within an industry between those who have captive mines and those who do not.

8.4.8 Across the mining sector, indigenous communities need to be roped into the process of development. A joint management of mining is possible, along the lines of JFM spliced with PRIs. Using 5% of the royalty collected from major minerals, a Special Development Fund can also be created, for the development of those who live in mining areas. Some of these aspects have been incorporated into Orissa's R&R policy. This will help resolve a standard problem with R&R, namely, that the intentions are correct, but the implementation is faulty. One can also think of a special development vehicle, along the lines of a trust, with representation from the local community.

Section 8.5: Increasing the Efficiency of Inputs – Capital/Entrepreneurship

8.5.1 Several aspects connected with increasing the efficiency in usage of capital and encouraging entrepreneurship have been touched upon in earlier sections. In this section, we particularly focus on industry. Jharkhand has the advantage of a substantial natural resource base, with around 40 per cent of the country's mineral resources. It is one of the major producers of coal, iron ore, mica and copper. It also formulated an Industrial Policy in 2001 that laid emphasis on mining and manufacturing industries, based on efficient exploitation of its mineral and power resources, increased private participation in infrastructure and creation of special industrial zones to reduce red tape and offer the best support facilities for industry. Towards this end, Jharkhand formulated a single window clearance system for industrial proposals. Jharkhand also offered a number of fiscal benefits to accelerate industrialization and attract investments. Consequently, Jharkhand Government has signed a large number of Memorandum of Understandings (MoUs) with private sector companies for investments and the setting up of industrial projects in the State. 73 MOUs have been signed in steel, mines and power and in the steel sector, there are proposals like ArcelorMittal, Posco, Tata Steel, Monnet Ispat and Energy, ElectroSteel, Jindal Steel and Power Limited. The interest of the private sector therefore justified the potential the State held as an investment destination.

Figure 8.4: Manufacturing GSDP Growth



Source: CSO

8.5.2 However, only a small fraction of the MoUs has seen ground level implementation. This means that one should revisit the policies, in order to identify the constraints. There are three broad aspects in this: (a) Improving the Investment Climate; (b) Improving Infrastructure; and (c) Creating Broader Linkages through the

development of Small and Medium scale, as well as cottage industries. (d) Ensuring that investments benefit the local people and the current perception changes.

8.5.3 The investment climate raises issues like land acquisition, mining, the development of industrial areas and simplifying laws and procedures. One of the main impediments in attracting actual investments into Jharkhand has been the lack of availability of land. The Government has three identified areas – Adityapur, Bokaro and Ranchi. – where there exist industrial area development authorities, responsible for the acquisition of land and the development of infrastructure facilities, such as roads, drainage, parks, water supply and public utilities. A fourth such area is sought to be identified and developed at Dumka in the Santhal Parganas. Jharkhand needs to create land banks in all the districts, acquiring a minimum of 200-500 acres, demarcating them as industrial estates and providing basic industrial infrastructure, including power, water, and drainage, along with appropriate environmental safeguards built in. Not all private sector players are in a position to acquire land and start businesses, especially those in the micro, small and medium sectors. In the rest of the State, apart from industrial estates, the private sector companies need to directly purchase land. The land issues have been dealt with earlier. Land is also inefficiently utilized. For instance, Heavy Engineering Corporation (HEC) occupies 2800 acres of land in Ranchi, without making much use of it. Since the bulk of the land to PSUs was given for a specific purpose, if that purpose is not being served, the State should be well within its right to recover the land for other uses. Currently mining and mineral based industries form the backbone of the industrial sector. Besides being one of the major producers of coal, iron ore, mica and copper in the country, Jharkhand has substantial reserves of uranium, bauxite, granite, limestone, gold, silver, graphite, magnetite and dolomite. But most such minerals are in forested areas, especially Reserve Forests. These require Centre-State negotiations. A particular example of this is in steel, where iron ore is often found in Reserve Forests.

8.5.4 Jharkhand has eight major industrial areas. These, along with existing/potential sectors, are: Palamu-Garhwa Industrial Area: Mineral based industries - deposits of iron ore, dolomite, coal, graphite, china clay and granite in the region. Lohardaga Industrial Area: Aluminum industries based on bauxite reserves. Koderma-Hazaribagh Industrial Area: Mica based industries. Also power, cement, glass, alloy steel, telecom and refractories. Ranchi Industrial Area: Medium and large-scale industries. Dhanbad-Bokaro Industrial Area: Coal and Steel industry is the mainstay of this region having excellent coal deposits. Singhbhum Industrial Area: Jamshedpur and adjoining Adityapur support a host of industries like iron and steel, auto components, cement, gases, uranium, copper and gold mining. Ghatshila Industrial Area: Copper and forest based industries. Deoghar Industrial Area: Also includes Jasidih, has oil mills, glass and steel. The potential of most of the areas remain

untapped. Along with mining and mineral extraction, mineral-based heavy and manufacturing industries, sectors like heavy engineering, power, infrastructure, manufacturing, auto components, cement, chemicals and food processing provides substantial growth opportunities. Chemical industries (caustic soda, dye and pigments, industrial and medical gas) have prospects and can be further developed to serve manufacturing units for the entire eastern region of the country. A case in point is the automobile and auto components industry SEZ at Adityapur (within the Singhbhum Industrial Area), being developed by the Adityapur Industrial Area Development Authority, with private sector players like Gammon and Jusco. Why has this potential not materialized? Reference has already been made to issues like infrastructure, mines, forests and land acquisition. But one issue that should be flagged is that the single-window clearance system has failed to take off, both at the district and the State-level. This has links with the governance and administrative delivery problems mentioned earlier. Suitable amendments to rules under the Contract Labour Act, the Industrial Disputes Act and other labour legislation are also necessary. While some infrastructure issues have been highlighted, one should also mention the capacity of Ranchi airport and the need for other airstrips, such as in Jamshedpur. Access to ports like Kolkata, Haldia and Paradip can provide additional advantages and Jharkhand needs to develop these linkages to harness the export potential. South Jharkhand is connected to Paradeep port by a single-lane road; this route requires a railway line. Inland Container Depot (ICD)/dry port for the completion of customs formalities linked to exports/imports from these ports also needs to be developed.

8.5.5 However, industrial policy is also about small and medium-scale industry and components of industrial policy for these should include: Availability of earmarked land in each district to be provided by the state; possible acquisition of land by the Government around and within industrial corridors/SEZs, exclusively for the sector; strengthening of business development services and proper market-linkage programmes for small and medium scale industries, so as to enable them improve their competitiveness, profitability and creditworthiness; improving credit information on small and medium scale industries through assistance to financial institutions in order to verify and collate historical data on the sector; Small and medium scale industries suffer from unfriendly bankruptcy laws and high transaction costs. So there is also a need to manage the risks the sector faces. The promotion of cottage industries is the real key to augmenting rural incomes. Augmentation of rural incomes will lead to increased demand for goods and services, which then can attract investments for setting up manufacturing industries. Comparing asset ownership by households with national averages shows that Jharkhand's markets have a huge potential of expansion and are far from saturation.

Table 8.4: Unregistered Manufacturing GSDP Growth in Jharkhand

Year	Unregistered manufacturing GSDP (Rs. Lakh)	Growth rate (%)
1999-00	85,516	
2000-01	88,307	3.3%
2001-02	84,950	-3.8%
2002-03	88,916	4.7%
2003-04	93,416	5.1%
2004-05	95,509	2.2%
2005-06	96,985	1.5%
2006-07	115,383	19.0%
2007-08	120,428	4.4%
2008-09	125,693	4.4%

Source: Central Statistical Organization

8.5.6 An example exists in the form of the tussar silk industry. A programme called 'Resham Doot' was launched, which had 40 pilot projects for tussar production, engaging around 60,000 tribal and economically backward families, primarily women, enabling them to earn up to Rs.5000 per month. Jharkhand not only enabled and sustained a network of sales and promotions (under the brand 'Jharcraft'), it also promoted weavers clusters and trained thousands in these clusters. The environment also benefited, as trees were planted for the silk worms feed on the saal and ashan trees. There is no reason why this cannot be replicated and Assocham has identified 12 SME clusters in Sarath (handicrafts and handlooms), Bokaro (engineering and fabrication), Ranchi (stone carving, wood carving, cane and bamboo), Lohardaga (cane and bamboo), Ichak (handicraft and handlooms), Hazaribagh (cane and bamboo), Ghato (handicraft and handlooms), Ramgarh (stone carving), Sahebganj (cane and bamboo), Deoghar (terracotta), Bishungarh (metal crafts) and Adityapur (auto components). However, developing clusters is not easy. But one general lesson of cluster development is that interventions have to be in the form of a package. Operating in silos does not work.

8.5.7 In government procurement, a purchase and price preference exists for SMEs. This should logically be extended to SCs/STs and the Madhya Pradesh example on such preferences has been extremely successful. The Dalit Chamber of Commerce and Industry is a successful instance of how entrepreneurship can empower those who

have historically been backward.[125] That fostering of entrepreneurship can have an additional advantage, in terms of the way land issues are perceived. The standard perception is that the corporate sector enters and wishes to acquire private land. However, there is nothing to bar individual land-owners from setting up enterprises on their land, without that land being alienated and in partnership with the corporate sector. In other words, instead of capital looking for land, the perspective is altered to one of land looking for capital.

8.5.8 Many States have held successful Investor Summits, Gujarat being the obvious example. Jharkhand government should think about encouraging something like this, with government support, but without the government squandering resources on such an event, apart from what which is in any case spent on building infrastructure. However, the focus of any such initiative should not be on coal, power and steel, but on physical infrastructure, health, education, small and medium enterprises, auto ancillaries, IT and perhaps consumer goods.

Section 9: Fiscal Issues

9.1 Jharkhand's budget for 2010-11 showed a revenue deficit/GSDP ratio of 3.92%, a fiscal deficit/GSDP ratio of 2.40% and a primary deficit/GSDP ratio of 0.05%. This is clearly unsustainable, particularly on the revenue side. The reasons are fairly obvious. Of the revenue receipts of Rs 20,101.74 crores, 23.2% was in the form of grants-in-aid. Non-tax revenue proper was only 15.6%. Both tax and non-tax revenue need to increase. Within the capital receipts of Rs 2,195.85 crores, 99.2% was in the form of borrowings and other liabilities. Of the total expenditure of Rs 22,297.57 crores, Plan expenditure was 46.2%. But out of this Plan expenditure of Rs 10,304.41 crores, 59.8% was revenue expenditure. Out of the non-Plan expenditure of Rs 11,913.18 crores, 86.6% was revenue expenditure and 17.8% was interest payments.[126] Incidentally, the Centre for Fiscal Studies seems to be dormant and nothing much seems to have come out of the USAID fiscal reform management project.[127] As an average for the period 2005-08, RBI reports a revenue deficit/GSDP ratio of 2.2%, a fiscal deficit/GSDP ratio of 8.8% and a primary deficit/GSDP ratio of 7.0%.[128] During 2008-09, "Jharkhand turned from a revenue deficit to a revenue surplus State" and "Jharkhand, witnessed a noticeable improvement in RD-GSDP ratio in 2008-09 (RE) over 2005-08". But that attempt at fiscal reform could not be sustained and "During 2009-10…Jharkhand, will not be able to meet the target of

[125] http://www.dicci.org/en/mission.html

[126] Computed from http://jharkhand.gov.in/New_Depts/finan/finan_fr.html
[127] At least, that is the impression one forms from http://cfsjharkhand.nic.in/usaid_project.html
[128] *State Finances: A Study of Budgets of 2009-10*, RBI, February 2010, http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=State%20Finances%20:%20A%20Study%20of%20Budgets

revenue balance on account of the impact of revised pays and pensions, higher need for public spending and a decrease in the flow of revenue receipts in view of the economic slowdown." On disclosure in the budget documents, RBI also has complaints about lack of disclosure by Jharkhand on outstanding liabilities and outstanding guarantees. But let us leave that aside.

9.2 The Jharkhand Fiscal Responsibility and Budget Management Act was passed in May 2007. Without getting into time-lines, this effectively requires the fiscal deficit/GSDP ratio to be no more than 3% and the revenue deficit to be eliminated. This means that one has to address both revenue and expenditure.

9.3 On the expenditure side, there is both revenue and capital expenditure. On both, we have talked about reforms earlier that should increase the efficiency of expenditure. This includes ZBB exercises on departments and schemes. Having said this, capital expenditure needs to increase to something approaching 8% of GSDP. On the revenue side, the most important items of expenditure are salaries, pensions and interest payments. These are effectively cast in stone. If anything, because of what was said earlier about manpower shortages, these are likely to increase. And any such increases in salaries need to be compensated by gains made through efficiencies in expenditure. While present interest payments cannot be touched, future interest payments can be curbed by reducing future debt. The present debt/GSDP ratio is around 31% and there should be a conscious time-bound attempt to reduce this to more than 28%. The only element of revenue expenditure that cannot be justified is what figures in the "others" category, namely, social services, economic services and committed liabilities. More often than not, these are subsidies and need to be recognized as such in budgets. Jharkhand State Electricity Board (JSEB), Jharkhand Hill Area Lift Irrigation Corporation (JHALIC), Jharkhand Police Housing Corporation (JPHC), Jharkhand Tourism Development Corporation (JTDC), Jharkhand State Forest Development Corporation (JSFDC), Jharkhand State Mineral Development Corporation (JSMDC), Jharkhand Industrial Infrastructure Development Corporation (JIIDC), Greater Ranchi Development Agency (GRDA), Tenughat Vidyut Nigam Limited (TVNL) and Jharkhand Silk and Handicraft Development Corporation (JSHDC) are examples. Some of these have not finalized accounts for years. Other than this being mandatorily imposed, they should not be bailed out through the State budget. Instead, there needs to be a clear dividends policy that requires them to pay dividends to the State. They need to be subjected to hard budget constraints. Though a minor item in the total quantum of revenue expenditure, if the municipal reforms are introduced, non-Plan revenue expenditure in the form of assignments to local bodies will also be reduced. In all probability, revenue expenditure will be between 15 to 16% of GSDP and capital expenditure should increase to almost 8% of GSDP.

9.4 We now turn to the revenue side. The first point to note is that Jharkhand's growth rates have been under-estimated in all fiscal projections. By our estimates, the base-line rate of real GSDP growth is 8%. Limited reforms will increase this to 10% and more substantial reforms increase it to closer to 15%. Even with something like a 12% real rate of GSDP growth, this means nominal rates of GSDP growth that are in excess of 18%. While tax ratios are expressed as shares of GSDP, the relationship between GSDP growth and tax revenue growth isn't linear. Beyond a threshold, tax revenue grows more than proportionately. Consequently, the projections show that Jharkhand's tax/GSDP ratio will increase to something like 12%, with a sharp increase in own tax/GSDP to about 8%. The 13th Finance Commission has flagged this, that Jharkhand's own Tax Revenue to GSDP ratio is low and also low in buoyancy. Revenue and capital expenditure as shares of GSDP add up to between 23 and 24%. With a revenue deficit target of 0% and a tax/GSDP ratio of 12%, this means that non-tax revenue/GSDP must be about 11%. Grants from the Centre can be assumed to contribute 3.5% of this. Therefore, non-tax revenue/GSDP (net of grants) must be at least 7.5% and even if one ignores mining royalties, this is doable, provided that appropriate user charges are imposed. In fact, a large chunk of fiscal reform should be targeted at increasing non-tax revenue/GSDP (net of grants). The sectoral strategies will differ, but across almost all sectors there are sufficient opportunities to do so and they have been mentioned under different sector heads in this report. On the fiscal deficit, revenue and capital expenditure add up to between 23 and 24% of GSDP. Revenue receipts (tax and non-tax) will exceed this, or fall only slightly short. Thus, if the revenue deficit target is addressed, Jharkhand should easily move to a fiscal surplus, especially if capital receipts have an additional channel through privatization of PSUs and sale of land. And in all this, one has not mentioned the possibility of use of external donor funds.

Table 9.1: Tax Revenue Projections under Different Scenarios (Rs. Crore)

	2000-01	2005-06	2010-11	2015-16	2020-21	2025-26
GSDP in Constant 1999-00 Prices						
No Reforms	30,941	43,347	64,634	92,134	134,931	201,913
Ltd Reforms	30,941	43,347	66,786	103,549	165,690	272,431
Serious Reforms	30,941	43,347	72,875	140,670	280,348	573,877
GSDP in Current Prices (assuming 6% long term annual inflation)						
No Reforms	32,093	54,879	98,394	189,449	364,767	702,328
Ltd Reforms	32,093	54,879	101,876	213,975	449,421	943,938
Serious Reforms	32,093	54,879	110,848	287,512	745,731	,934,234
Annual Tax Revenues (assuming 12% Tax Rev to GSDP Ratio is maintained)						

	2000-01	2005-06	2010-11	2015-16	2020-21	2025-26
No Reforms	3,931	8,203	11,807	22,734	43,772	84,279
Ltd Reforms	3,931	8,203	12,225	25,677	53,931	113,273
Serious Reforms	3,931	8,203	13,302	34,501	89,488	232,108
Additional Annual Tax Revenues due to Reforms and available for Welfare and Developmen						
No Reforms	-	-	-	-	-	-
Limited Reforms	-	-	418	2,943	10,158	28,993
Serious Reforms	-	-	1,495	11,768	45,716	147,829

Source: Estimations based on data from CSO and RBI

Section 10: In Conclusion

10.1 Between 2000-01 and 2008-09, Jharkhand's trend rate of real GSDP growth has been 7.8%. With no reforms, Jharkhand's base-line rate of real GSDP growth will remain around 8%, not especially remarkable. With limited reforms, this can increase to 10% and with more substantial reforms, it has the potential of approaching 15%. If human development outcomes can be improved, the potential increment to GSDP growth is of the order of 2%, if not more. If physical infrastructure can be improved, the potential increment to GSDP growth is also of the order of 2%, of which, more than 1% is on account of the power sector alone. If public delivery of services is improved, there is an additional increment of at least 1%. And if the legal system functions efficiently, there is an increment of more than 1%. Admittedly, these are back-of-the-envelope kind of numbers and lack any robustness in quantification. However, they are indicative and underline the slack in the system. But because of the slack in the system, a medium-term real annual average growth rate of 10% in GSDP is eminently doable (Para 2.1.8). The list below, divided into short-term, medium-term and long-term, indicates what Jharkhand must do to achieve this.

10.2 **Short-term**

- Revise the Bihar Civil Service (Executive Branch) and the Bihar Junior Civil Service (Recruitment Rules) of 1951 (Para 3.1.4).
- Pre-announce filling of 20% of backlog in posts annually through JPSC and JSSC (Para 3.1.6)
- Separate District Magistrate/Collector functions from District Development Commissioner (Para 3.2.1).

- Announce clear policy on promotions (Para 3.2.2).
- Revamp Bihar Service Code, Bihar Rules of Executive Business, Bihar Treasury Code, Bihar Financial Rules (Para 3.2.4).
- Announce transfer policy with public reporting of the number of transfers (Para 3.2.5).
- Restructure and consolidate SCSP/TSP funds to create model villages (Para 3.3.4).
- Undertake ZBB of schemes (Para 3.3.5).
- Establish monitoring unit in CM's office with four cells – rural development (Swajaldhara, MGNREGS, Total Sanitation, NRHM, SGRY, SJGSY, ICDS, SSA, MDMS, RKVY); infrastructure (PMGSY, RGGVY, IAY)); urban development (JNNURM); and administrative delivery and finance (FRBM) (Para 3.3.5).
- Implement rules under RTI and introduce proactive disclosure (Para 3.4.1).
- Unify and standardize forms required for information (Para 3.4.3).
- Computerize treasury management fully (Para 3.4.6).
- Abolish excise duties on country liquor (Para 4.3).
- Address problem of under-trials and free those accused of minor crimes (Para 4.3).
- Consider fiscal incentives for introducing Aadhaar (Para 5.1.4).
- Introduce participatory and decentralized identification of BPL (Para 5.2.1).
- Enable proper choice in SHG-run PDS shops (Para 5.2.2).
- Introduce centralized kitchens through out-sourcing to NGOs of MDMS/ICDS (Para 5.2.3).
- For MGNREGS, have Employment Guarantee Assistant in every village, make social audits mandatory, introduce MGNREGS payments through haats (Para 5.4.2).
- For the next few years, announce that MGNREGS will only concentrate on de-siltation (Para 5.4.3).
- Introduce skill-upgradation voluntary opting out of MGNREGS (Para 5.4.4).
- Pass Jharkhand Municipal Bill, impose hard budget constraints on ULBs (Para 6.4).
- Approach NHB for drafting Housing Policy (Para 6.8).
- Use a cess to set up Jharkhand Road Development Fund (Para 7.1.1).

- Announce a clear PPP policy for roads, tap external sources (Para 7.1.5).
- Make maintenance contracts mandatory in road construction (Para 7.1.6).
- Improve coordination between REO and RCD (Para 7.1.7).
- Do not start road projects until a substantial amount of land has been acquired (Para 7.1.7).
- Remove and outsource the JE system, outsource DPRs, use IT for real-time monitoring (Para 7.1.7).
- Approach IFCD for developing integrated road network plan (Para 7.1.7).
- Introduce road users' cess on commercial vehicles (Para 7.1.8).
- Impose 10% green tax on commercial vehicles older than 12 years (Para 7.1.9).
- Introduce Gramin Seva and enter into carriage agreements with large bus operators (Para 7.1.9).
- Announce open access charges for electricity, unbundle along functional lines with Joint Management Councils, make ARRs mandatory for JSEB (Para 7.2.2, Para 7.2.19).
- Notify transfer policy for employees of JSEB (Para 7.2.11).
- Franchise power distribution in urban areas (Para 7.2.11).
- Introduce 100% electronic metering in urban areas, introduce legal provisions for recovering dues (Para 7.2.20).
- Announce that 3% of power purchases will be through non-conventional sources (Para 7.2.20).
- Introduce participatory irrigation management, link water user associations with PRIs (Para 7.3.2, Para 7.3.6)).
- Revise water rates upwards (Para 7.3.7).
- Publicly disseminate IAY lists, use NHB for developing IAY menus (Para 7.4.2).
- Set up Jharkhand Institute of Educational Planning and Administration, independent of JCERT (Para 8.1.3).
- Examine licensing and regulatory requirements for setting up private schools (Para 8.1.4).
- Encourage, beyond Standard VIII, schools that teach English in every block (Para 8.1.4).

- Use community management for schools (Para 8.1.4).
- Pass Private Universities Act (Para 8.1.5).
- Privatize employment exchange functions (Para 8.1.10).
- Introduce vocational training through partners identified by National Skill Development Corporation (Para 8.1.11).
- Offer incentives for migration through registered networks (Para 8.1.12).
- Examine 2% fee under APMC Act, develop channels outside APMC system, leading to rural service hubs (Para 8.2.2, Para 8.2.3).
- Revise Rehabilitation and Resettlement Policy, introduce provision on annual compensation (Para 8.2.4, Para 8.4.6).
- Obtain details of land acquisition, compensation and rehabilitation by CCL, BCCL, ECL, HEC (Para 8.2.4).
- Open up land markets for tenancy and leasing (Para 8.2.4).
- Revamp manual of Forest Laws and Regulation of Trade laws inherited from Bihar (Para 8.3.1).
- Announce policy for closure of mines (Para 8.4.4).
- Develop SME clusters (Para 8.5.6).
- Introduce purchase and price preference in government procurement for SC-s/ST-s (Para 8.5.7).
- Hold an Investor Summit (Para 8.5.8).
- Energize the Centre for Fiscal Studies (Para 9.1).
- Make finalize of accounts mandatory for State-level PSUs, announce dividends policy (Para 9.3).

10.3 **Medium-term**

- Set targets for improvements in human development outcomes (poverty, education, health) that can be monitored (Para 2.2.1).
- Undertake ZBB of Ministries and Departments (Para 3.3.1).
- Get JPSC and JSSC to prepare list of posts required in each Ministry/Department, including PRIs/ULBs (Para 3.1.3)

- Revise entry examinations through JPSC and JSSC (Para 3.1.4).
- Restructure training components of Shri Krishna Institute of Public Administration (Para 3.2.3).
- Give Lokayukta powers of prosecution, set up State Vigilance Commission (Para 3.2.4).
- Create Financial Advisers in major departments (Para 3.2.6).
- Solicit ideas of improving governance from within the system, introduce evaluation of superiors by subordinates (Para 3.2.7)
- Introduce Public Services Guarantee Act (Para 3.4.4).
- Implement "File Tracker" (Para 3.4.7).
- Appoint Arrears Committee for judicial delays (Para 4.3).
- Separate administrative and judicial powers of Forest Department (Para 4.3).
- Pass Jharkhand Police Act (Para 4.5).
- Consolidate all Village-level committees under Village Development Committee (Para 5.1.6).
- Approach ILFS for drafting district-level plans (Para 5.1.6).
- Approach World Food Programme for setting up grain banks (Para 5.2.2).
- Use PPP templates for healthcare delivery (Para 5.3.1).
- Make master plans for urban areas public (Para 6.4).
- Set up State Finance Commission (Para 6.5).
- Create inventory of urban land (Para 6.7).
- Create autonomous Infrastructure Board (Para 7.1.7).
- Use road users' cess to create integrated check-posts (Para 7.1.8).
- Devise off-grid and captive power solutions for villages and distant areas, introduce low-cost registration system for local vendors (Para 7.2.2, Para 7.2.17).
- Announce that areas within 5 km radius of power plants of more than 1000 MW capacity will be free from load-shedding (Para 7.2.4).

- Use Power Finance Corporation as lead agency for obtaining clearances, auction projects after obtaining clearances (Para 7.2.5).
- Introduce open competitive bidding, with single-bid criterion, not cost-plus tariffs (Para 7.2.6).
- Focus on gas and hydro-based power and shale gas (Para 7.2.7).
- Modernize transmission lines, build new transmission lines on annuity basis (Para 7.2.8).
- Create separate company for power evacuation from IPPs (Para 7.2.9).
- Prepare and notify Rural Electrification Plan, integrated with District Development Plan, announce regular and high-quality power to villages at prescribed timings (Para 7.2.16, Para 7.2.18)).
- Use ILFS for water programmes in urban areas (Para 7.3.7).
- Transform public universities into affiliating and regulatory bodies (Para 8.1.5).
- Review CNTA and SPTA, without diluting transfer clauses (Para 8.2.4).
- Improve the SAR process for restoration of alienated land (Para 8.2.4).
- Consolidate small land holdings (Para 8.2.4).
- Map “go” and “no go” areas for mining, announce that forest clearances will be required before invitation of bids (Para 8.4.4).
- Introduce regulatory framework for water pollution (Para 8.4.4.).
- Announce policy for small and medium mines, register and regulate them (Para 8.4.7).
- Introduce development cess on mines, link price with market prices of minerals on metal exchanges, with equal royalty rates for captive mines (Para 8.4.8).
- Introduce joint management of mining, with PRIs (Para 8.4.9).
- Recover land not used by PSUs (Para 8.5.3).
- Amend labour legislation and rules (Para 8.5.4).
- Set target of reducing debt/GSDP ratio to 28% (Para 9.3).
- Target non-tax revenue (Para 9.4).

10.4 Long-term

- Announce and implement Medium Term Fiscal Plan and introduce Monthly Expenditure Plan (Para 3.2.6).
- Sell land of existing jails and use proceeds to create new and modern jails with judicial infrastructure (Para 4.6).
- Create cadre for ULBs, delink ULBs from Department of Urban Development (Para 6.6).
- Consolidate government-owned land in urban areas, sell off land and use proceeds to create integrated office complexes (Para 6.8).
- Use a share of power projects for local area development (Para 7.2.4).
- Update, modernize and computerize land records (Para 8.2.4).

Appendix

Table A.1: Infant Mortality Rate of Indian States: Better than Average Performance of Jharkhand

State/ Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Andhra Pradesh	63	66	66	65	66	*63*	59	59	57	56	54	52
Arunachal Pradesh	47	44	43	44	39	*37*	34	38	37	40	37	32
Assam	76	76	76	75	73	*70*	67	66	68	67	66	64
Bihar	71	67	66	62	62	*61*	60	61	61	60	58	56
Chhattisgarh				79	76	*73*	70	60	63	61	59	57
Goa	19	23	21	23	19	*18*	16	17	16	15	13	10
Gujarat	62	64	63	62	60	*59*	57	53	54	53	52	50
Haryana	68	70	68	67	65	*62*	59	61	60	57	55	54
Himachal Pradesh	63	64	62	60	54	*52*	49	51	49	50	47	44
Jammu & Kashmir		45	25	50	48	*46*	44	49	50	52	51	49
Jharkhand				70	62	*57*	51	49	50	49	48	46
Karnataka	53	58	58	57	58	*55*	52	49	50	48	47	45
Kerala	12	16	14	14	11	*11*	11	12	14	15	13	12
Madhya Pradesh	94	98	91	88	86	*84*	82	79	76	74	72	70
Maharashtra	47	49	48	48	45	*44*	42	36	36	35	34	33

State/ Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Manipur	30	25	56	23	20	*18*	16	14	13	11	12	14
Meghalaya	54	52	19	58	56	*57*	57	54	49	53	56	58
Mizoram	19	23		21	19	*18*	16	19	20	25	23	37
Nagaland			49					17	18	20	21	26
Orissa	96	98	97	96	90	*87*	83	77	75	73	71	69
Punjab	51	54	53	52	51	*50*	49	45	44	44	43	41
Rajasthan	85	83	81	79	79	*77*	75	67	68	67	65	63
Sikkim	51	52	42	49	42	*38*	33	32	30	33	34	33
Tamil Nadu	53	53	52	51	49	*46*	43	41	37	37	35	31
Tripura	51	49	0	41	39	*36*	32	32	31	36	39	34
Uttar Pradesh	85	85	84	83	82	*79*	76	72	73	71	69	67
Uttarakhand				50	48	*45*	41	42	42	43	48	44
West Bengal	55	53	52	51	51	*49*	46	40	38	38	37	35
Andaman & Nicobar Is.	33	30	25	23	18	*18*	18	19	27	31	34	31
Chandigarh	40	32	28	28	24	*22*	19	21	19	23	27	28
Dadra & Nagar Haveli	63	61	56	58	58	*56*	54	48	42	35	34	34

State/ Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Daman & Diu	38	51	35	48	40	*40*	39	37	28	28	27	31
Delhi	35	36	31	32	29	*29*	28	32	35	37	36	35
Lakshadweep	36	26	32	27	33	*30*	26	30	22	25	24	31
Puducherry	22	21	22	23	22	*23*	24	24	28	28	25	25
India	71	72	70	68	66	*63*	60	58	58	57	55	53

Source: SRS, Regsitrar General of India, various years. Units: per 1000. Note: Data for 2002 estimated as average of '01 and '03 figures.

Table A.2: Gross Enrollment Rates and Transition into Middle School: Improving but Stuck in Primary

Year	2004-05	2004-05	2004-05	2005-06	2005-06	2005-06	2006-07	2006-07	2006-07	2007-08	2007-08	2007-08
Indicator	GER Primary	GER Middle	Transition*	GER Primary	GER Middle	Transition*	GER Primary	GER Middle	Transition*	GER Primary	GER Middle	Transition*
Andhra Pradesh	97	72	0.74	95	74	0.78	96	75	0.78	96	77	0.81
Arunachal Pradesh	123	76	0.61	132	81	0.61	137	85	0.62	143	94	0.66
Assam	105	70	0.66	107	73	0.68	98	66	0.67	106	91	0.86
Bihar	84	32	0.39	87	34	0.39	95	39	0.41	104	46	0.44
Chhattisgarh	132	80	0.61	122	69	0.57	123	88	0.71	126	90	0.72

Year	2004-05	2004-05	2004-05	2005-06	2005-06	2005-06	2006-07	2006-07	2006-07	2007-08	2007-08	2007-08
Goa	110	101	0.91	108	98	0.91	120	94	0.78	130	89	0.68
Gujarat	119	74	0.62	119	74	0.62	120	75	0.63	123	78	0.64
Haryana	82	76	0.93	80	75	0.94	88	80	0.91	90	76	0.84
Himachal Pradesh	109	109	1.00	109	108	0.99	113	108	0.95	112	114	1.02
Jammu & Kashmir	84	60	0.72	100	64	0.64	103	65	0.63	103	67	0.65
Jharkhand	95	43	0.46	105	46	0.44	112	52	0.47	154	62	0.40
Karnataka	107	85	0.80	106	85	0.80	107	89	0.83	106	90	0.85
Kerala	94	98	1.05	94	98	1.04	93	99	1.06	92	100	1.08
Madhya Pradesh	132	83	0.63	144	92	0.64	150	96	0.64	153	100	0.65
Maharashtra	110	98	0.89	112	101	0.90	114	102	0.89	102	87	0.85
Manipur	152	95	0.62	158	98	0.62	164	103	0.63	173	104	0.60
Meghalaya	148	76	0.52	162	86	0.53	182	102	0.56	192	103	0.54
Mizoram	128	82	0.64	169	118	0.70	159	87	0.55	171	86	0.50
Nagaland	88	56	0.63	89	60	0.68	90	61	0.67	93	60	0.65
Orissa	130	74	0.57	118	65	0.55	114	75	0.66	117	80	0.68
Punjab	77	65	0.85	77	68	0.87	81	69	0.85	93	69	0.74

Year	2004-05	2004-05	2004-05	2005-06	2005-06	2005-06	2006-07	2006-07	2006-07	2007-08	2007-08	2007-08
Rajasthan	121	71	0.58	122	74	0.61	122	80	0.65	118	81	0.69
Sikkim	144	67	0.46	151	74	0.49	144	73	0.51	148	75	0.50
Tamil Nadu	118	107	0.90	120	107	0.89	118	109	0.93	116	113	0.97
Tripura	131	78	0.60	143	83	0.58	143	86	0.60	148	88	0.59
Uttar Pradesh	108	52	0.49	111	53	0.48	114	54	0.47	114	68	0.60
Uttarakhand	118	88	0.75	120	90	0.75	122	92	0.75	119	93	0.78
West Bengal	112	66	0.59	105	67	0.64	103	71	0.69	113	71	0.63
A&N Islands	109	107	0.98	102	103	1.02	106	103	0.97	102	102	1.00
Chandigarh	74	69	0.93	79	68	0.85	90	73	0.82	96	82	0.85
D&N Haveli	135	79	0.59	144	83	0.58	158	89	0.56	174	99	0.57
Daman & Diu	136	117	0.86	135	125	0.93	137	118	0.87	136	105	0.77
Delhi	94	88	0.93	115	94	0.81	106	93	0.88	109	100	0.91
Lakshadweep	59	59	1.00	62	62	1.00	60	59	0.99	60	54	0.90
Puducherry	132	108	0.82	134	107	0.80	142	108	0.76	144	112	0.78
India	108	70	0.65	109	71	0.65	111	74	0.66	114	78	0.68

**Note: Transition Index is Middle School GER/Primary School GER. Source: Selected Educational Statistics, GOI, various years. Gross Enrollment Rate for primary education bw 6 to 11 years and for middle between 11 to 13 yrs.*

TableA.3: Tax Revenues as a Share of GSDP: Emerging Consensus at 12 percent

	1999-00	2000-01	2001-02	2002-03	*2003-04Est*	2004-05	2005-06	2006-07	2007-08
Andhra Pradesh	9.6			10.1	*10.3*	10.5	10.9	11.8	12.2
Arunachal Pradesh	22.0	7.6	4.5	7.7	*8.5*	8.5	11.5	12.5	13.8
Assam	7.7	8.4	8.5	8.6	*9.6*	10.1	10.9	11.5	11.6
Bihar	17.4	16.6	14.9	14.6	*16.6*	16.9	17.6	17.4	19.1
Chhattisgarh		4.9	10.7	11.3	*11.3*	11.7	12.9	12.7	12.2
Goa	8.8	9.2	9.5	11.3	*10.4*	8.9	10.1	10.5	10.2
Gujarat	8.9	9.6	8.7	7.7	*7.8*	8.0	6.9	8.7	11.6
Haryana	7.9	8.0	8.3	8.7	*8.7*	8.6	8.5	9.4	12.8
Himachal Pradesh	10.9	6.8	7.2	6.5	*7.3*	7.8	5.8	8.0	8.5
Jammu & Kashmir	11.6	8.3	8.8	8.3	*9.2*	9.9	6.4	11.7	12.4
Jharkhand		12.2	12.2	12.1	*11.1*	9.5	14.9	11.0	12.1
Karnataka	9.8	10.7	11.1	10.9	*12.7*	12.8	16.5	13.9	13.7
Kerala	9.7	10.3	9.7	10.4	*10.5*	10.3	9.8	10.5	10.7
Madhya Pradesh	11.3	13.2	9.3	11.4	*11.1*	12.0	13.2	14.2	15.6
Maharashtra	8.0	8.9	8.7	8.4	*8.7*	8.9	8.8	9.1	9.3

	1999-00	2000-01	2001-02	2002-03	*2003-04Est*	2004-05	2005-06	2006-07	2007-08
Manipur		6.8	5.7	9.2	*8.7*	8.1	8.6	10.3	11.9
Meghalaya		7.1	6.7	6.7	*7.6*	8.2	9.4	10.3	10.4
Mizoram		5.9	3.2	5.7	*6.8*	8.0	10.3	11.9	13.3
Nagaland		4.1	4.4	3.6	*4.1*	4.6	6.4	7.3	8.0
Orissa	8.0	11.0	10.9	11.4	*11.3*	11.4	12.6	12.9	12.3
Punjab	6.8	7.5	6.8	7.7	*7.4*	7.2	9.4	8.7	8.2
Rajasthan	8.1	9.9	9.3	10.5	*7.9*	7.2	11.8	12.0	12.4
Sikkim	16.6	13.6	14.5	14.3			18.0	19.4	23.6
Tamil Nadu	10.1	10.3	10.7	11.0	*10.5*	9.6	12.1	12.3	12.4
Tripura		6.6	6.1	6.4	*7.0*	7.5	7.5	8.3	9.4
Uttar Pradesh	9.6	11.0	10.8	11.4	*12.0*	12.4	13.4	14.9	15.8
Uttarakhand			7.9	7.5	*8.2*	8.3	10.7	11.6	11.7
West Bengal	7.7	7.1	6.9	6.9	*7.4*	7.8	7.4	7.6	7.7
Delhi	6.2	7.3	7.5	7.5	*7.8*	7.7	8.4	8.1	8.2
Puducherry							7.7	6.7	6.3
India States	8.6	9.4	9.3	9.5	*9.9*	10.1	10.3	10.8	11.0

Source: CSO and RBI. Tax revenues as a share of GSDP (%)

Table A.4: Gross Fiscal Deficit as a share of GSDP: Rising and much higher than the national average

	1999-00	2000-01	2001-02	2002-03	*2003-04Est*	2004-05	2005-06	2006-07	2007-08
Andhra Pradesh	3.9	5.0	4.3	4.6	*3.9*	3.2	3.5	2.0	2.7
Arunachal Pradesh	3.7	11.8	13.1	10.3	*10.6*	22.4	8.8	-3.1	-0.4
Assam	4.6	4.2	3.8	2.1	*2.9*	8.7	-0.6	-1.1	-1.1
Bihar	12.2	8.5	7.0	7.6	*6.2*	4.8	4.7	3.0	1.5
Chhattisgarh		-0.2	3.6	3.0	*5.7*	4.8	0.8	-0.1	0.2
Goa	5.4	6.1	5.8	4.7	*4.8*	4.7	4.5	3.2	3.1
Gujarat	6.2	7.2	5.3	4.3	*5.5*	5.3	2.8	2.2	1.6
Haryana	4.2	3.9	4.2	2.0	*3.5*	1.1	0.3	-0.9	0.8
Himachal Pradesh	1.3	11.8	8.8	12.4	*11.5*	7.2	2.8	3.2	1.7
Jammu & Kashmir	8.5	13.0	4.1	6.1		4.2	6.0	5.0	8.2
Jharkhand			4.7	5.8	*3.9*	7.1	9.0	8.3	9.0
Karnataka	4.2	3.9	5.2	4.4	*3.4*	2.7	2.0	2.3	2.2
Kerala	6.6	5.3	4.2	5.7	*5.7*	4.8	3.3	2.6	3.7
Madhya Pradesh	4.9	3.4	4.2	4.7	*7.1*	6.4	3.9	2.1	2.0
Maharashtra	4.7	3.6	4.0	4.8	*5.3*	4.8	4.0	2.3	-0.5

	1999-00	2000-01	2001-02	2002-03	*2003-04Est*	2004-05	2005-06	2006-07	2007-08
Manipur		**7.5**	**10.1**	**7.1**	***7.2***	**13.5**	**5.3**	**8.8**	**-1.7**
Meghalaya	**5.8**	**6.3**	**4.9**	**3.4**	***3.8***	**3.7**	**2.8**	**1.0**	**2.5**
Mizoram	**11.6**	**21.6**	**21.7**	**14.6**	***13.2***	**16.9**	**14.6**	**6.4**	**11.9**
Nagaland	**8.9**	**10.6**	**9.2**	**9.9**		**7.2**	**5.6**	**2.6**	**6.0**
Orissa	**8.7**	**7.7**	**8.5**	**5.7**	***5.9***	**4.5**	**0.4**	**-0.9**	**-1.1**
Punjab	**4.8**	**5.2**	**6.2**	**5.4**	***5.4***	**5.0**	**2.4**	**3.6**	**3.2**
Rajasthan	**6.5**	**5.2**	**6.3**	**6.9**	***6.6***	**6.0**	**4.0**	**2.6**	**1.9**
Sikkim		**5.0**	**5.9**				**8.1**	**4.8**	**2.8**
Tamil Nadu	**4.0**	**3.5**	**3.2**	**4.3**	***3.2***	**2.7**	**1.0**	**1.4**	**1.2**
Tripura	**6.0**	**8.1**	**8.4**	**8.0**	***4.5***	**5.7**	**1.2**	**-1.3**	**0.2**
Uttar Pradesh	**6.3**	**5.6**	**5.2**	**4.6**	***7.3***	**5.5**	**3.6**	**3.1**	**4.0**
Uttarakhand		**0.9**	**2.7**	**4.8**	***6.9***	**11.2**	**7.2**	**2.8**	**4.9**
West Bengal	**8.6**	**7.6**	**7.5**	**6.3**	***6.8***	**5.7**	**4.2**	**4.3**	**3.7**
Delhi	**2.5**	**2.7**	**2.7**	**3.4**	***3.1***	**2.6**	**-0.2**	**0.3**	**1.4**
India States	**5.4**	**5.0**	**5.0**		***5.2***		**3.0**	**2.2**	**1.9**

Note: The gross fiscal deficit is the excess of total expenditure including loans net of recoveries over revenue receipts (including external grants) and non-debt capital receipts. Source: CSO and RBI

Table A.5: Sectoral Trend Growth Comparison with Other States: Rapidly growing but Agriculture and Infrastructure bring it down.

		Jharkhand			Bihar	Chhattisgarh	West Bengal	India State Aggregates			
		00-'01 to '04-05	04-05 to '08-09	00-01 to '08-09	01 to '08-09	00-01 to '08-09	-01 to '08-09	Max	Mean	Median	Min
1	Agriculture	2.5	-1.8	-0.6	2.0	7.8	2.0	11.7	3.2	3.1	-2.7
2	Forestry & logging	11.5	5.5	5.2	4.1	-1.3	7.8	10.5	1.7	0.9	-13.3
3	Fishing	-1.7	33.6	19.3	4.2	7.0	5.2	25.4	4.3	4.2	-24.4
a.	*Agri. and Allied*	3.2	-0.2	0.4	2.2	7.0	2.6	11.0	3.2	2.7	-3.0
4	Mining & quarrying	1.8	-1.0	1.5	-9.2	9.0	1.9	23.2	8.0	7.1	-9.2
5	Manufacturing	19.0	11.7	15.7	4.8	15.5	5.7	24.5	9.0	7.9	1.8
5.1	*Manu-Registered*	21.7	12.1	17.2	-1.0	17.4	4.8	39.1	10.6	8.7	-1.0
5.2	*Manu-Unregistered*	2.5	8.0	5.2	6.2	6.7	6.4	10.7	6.7	6.6	4.0
6	Construction	10.2	8.2	10.9	29.8	20.6	15.0	34.7	13.5	12.7	0.8
7	Electricity, Gas, WSS	0.8	3.2	0.4	3.5	5.2	6.2	33.6	6.3	6.2	-11.7
b.	*Industry*	11.1	7.9	10.3	16.9	12.9	8.6	28.2	10.8	9.9	5.4

		Jharkhand			Bihar	Chhattisgarh	West Bengal	India State Aggregates			
		00-'01 to '04-05	04-05 to '08-09	00-01 to '08-09	01 to '08-09	00-01 to '08-09	-01 to '08-09	Max	Mean	Median	Min
8	Transport, storage & Communication	9.6	15.1	12.9	10.5	11.1	10.9	21.7	13.1	5.3	4.2
8.1	*Railways*	9.4	12.1	11.1	3.0	3.4	10.2	22.1	11.1	10.6	2.7
8.2	*Transport by other means*	5.3	7.9	7.5	2.7	12.7	6.7	17.1	7.9	7.3	2.7
8.3	*Storage*	0.2	7.8	5.2	1.6	-2.5	0.0	24.5	4.1	3.3	-3.8
8.4	*Communication*	17.7	26.8	23.0	0.0	0.0	0.0	55.1	23.8	22.2	9.9
9	Trade, hotels and restaurants	11.5	5.7	9.4	14.7	9.8	6.6	14.8	7.4	7.7	0.1
10	Banking & Insurance	3.0	15.0	8.3	10.0	10.2	9.4	16.9	11.0	10.8	3.7
11	Real Estate	7.4	10.1	8.8	5.3	4.7	12.9	16.6	6.5	6.0	0.6
12	Public administration	4.6	1.3	1.7	4.1	5.0	2.4	9.3	4.7	4.8	-1.3
13	Other services	-2.5	8.3	5.8	3.7	6.5	5.0	8.1	4.6	5.0	-3.3
c.	*Services*	5.9	9.0	8.2	9.3	8.0	8.1	12.1	7.9	8.1	4.4
14	State domestic product	7.5	7.2	7.8	8.2	9.7	6.7	11.1	7.7	7.8	4.8

Notes: Trend growth estimated using data from CSO estimates of GSDP constant 1999-00 prices

Table A.6: Stagnating growth to worsen without reforms

		Past Growth Trends			Growth with NO REFORMS		Growth with LIMITED REFORMS	Growth with SERIOUS PEOPLE ORIENTED REFORMS
	Sectors	00-01 to '08-09	00-01 to '04-05	04-05 to '08-09	2009-2025-26	Why Slowing Growth?	2009-2025-26 .	2009-2025-26	Impact of Reforms on Growth
1	Agriculture	-1	2	-2	1.0	Stagnating agriculture	2.0	5.0	Improvements in irrigation & maktg. infra.
2	Forestry & logging	5	12	6	3.0	Limited avenues for forestry products	5.0	10.0	Marketing networks and better JFM
3	Fishing	19	-2	34	5.0	Drying water bodies	7.0	12.0	Greater water bodies and PRI involvement
4	Mining & quarrying	0	3	0	0.0	Opposition to new mining	3.0	8.0	A more inclusive approach to R&R
5.	Manu-Registered	17	22	12	10.0	Governance bottlenecks	13.0	18.0	Better land availability
5.	Manu-Unregistered	5	3	8	10.0	Limited demand within Jharkhand	10.0	15.0	More opportunities for the masses
6	Construction	11	10	8	10.0	Slowing overall economic growth	10.0	15.0	Resurgence in small towns and rural areas
7	Electricity, Gas & Water	0	1	3	1.0	Delayed projects and investment	3.0	10.0	Greater investment
8.	Railways	11	9	12	10.0	Freight growth not possible without significant ec. gr.	10.0	15.0	Greater economic activity
8.	Transport by other means	7	5	8	10.0	Momentum of pvt. transp. & rural roads	10.0	15.0	Greater economic activity

		Past Growth Trends			Growth with NO REFORMS		Growth with LIMITED REFORMS	Growth with SERIOUS PEOPLE ORIENTED REFORMS	
	Sectors	00-01 to '08-09	00-01 to '04-05	04-05 to '08-09	2009-2025-26	Why Slowing Growth?	2009-2025-26 .	2009-2025-26	Impact of Reforms on Growth
8.	Storage	5	0	8	5.0	Limited agri & slowing manuf. gr.	7.5	10.0	Demand from forestry and agro processing
8.	Communication	23	18	27	10.0	Momentum of new technologies	15.0	20.0	Greater economic activity
9	Trade, hotel, restaurants	9	11	6	8.0	Correlated with overall GDP growth	10.0	15.0	Highly correlated with overall GDP
1	Banking & Insurance	8	3	15	8.0	Credit correlated with governance	10.0	15.0	Greater economic activity plus MFI
1	Real estate & business ser.	9	7	10	10.0	Reducing slack	10.0	15.0	Correlated with credit, repatriation and road building
1	Public administration	2	5	1	3.0	Ltd. ability of state to afford greater	5.0	10.0	Greater tax revenues and removal
1	Other services	6	-3	8	5.0	Staffing & development schemes	5.0	10.0	of staffing & development bottlenecks
1	GSDP	8	7	7	8.0	*Counted among laggard Indian states*	10.0	15.0	*At forefront of all states –inclusive development*

Note: Estimates based on Data from CSO and author analysis of inclusive growth enabling conditions in Jharkhand and nationally. Growth estimates of GSDP at factor cost in 1999-00 prices. Growth Trends based on logest command in MS Excel.

Table A.7: Impact of Reform enabled Growth on Tax Revenues

Rs. Crore	2000-01	2005-06	2010-11	2015-16	2020-21	2025-26
GSDP in Constant 1999-00 Prices						
No Reforms	30,941	43,347	64,634	92,134	134,931	201,913
Ltd Reforms	30,941	43,347	66,786	103,549	165,690	272,431
Serious Reforms	30,941	43,347	72,875	140,670	280,348	573,877
GSDP in Current Prices (assuming 6% long term annual inflation)						
No Reforms	32,093	54,879	98,394	189,449	364,767	702,328
Ltd Reforms	32,093	54,879	101,876	213,975	449,421	943,938
Serious Reforms	32,093	54,879	110,848	287,512	745,731	1,934,234
Annual Tax Revenues (assuming 12% Tax Rev to GSDP Ratio is maintained)						
No Reforms	3,931	8,203	11,807	22,734	43,772	84,279
Ltd Reforms	3,931	8,203	12,225	25,677	53,931	113,273
Serious Reforms	3,931	8,203	13,302	34,501	89,488	232,108

Rs. Crore	2000-01	2005-06	2010-11	2015-16	2020-21	2025-26
Extra Annual Tax Revenues due to Reforms and available for Welfare and Development						
No Reforms	-	-	-	-	-	-
Limited Reforms	-	-	418	2,943	10,158	28,993
Serious Reforms	-	-	1,495	11,768	45,716	147,829

Source: Author estimations based on data from CSO and RBI

Table A.8 Peoples Development Index Values (in decreasing order)

Indices	Peoples' Infrastructure Index	Peoples' Infrastructure Index	Socio-economic Index	Socio-economic Index	Peoples Development Index	Peoples Development Index
District	Early 2000s	Late 2000s	Early 2000s	Late 2000s	Early 2000s	Late 2000s
Purbi Singhbhum	0.70	0.69	0.74	1.05	0.72	0.87
Dhanbad	0.88	0.81	0.64	0.77	0.76	0.79
Bokaro	0.63	0.60	0.64	0.80	0.63	0.70
Hazaribag	0.43	0.45	0.70	0.92	0.56	0.69
Ranchi	0.49	0.50	0.69	0.87	0.59	0.68
Pashchimi Singhbhum	0.40	0.46	0.39	0.83	0.39	0.65

Indices	Peoples' Infrastructure Index	Peoples' Infrastructure Index	Socio-economic Index	Socio-economic Index	Peoples Development Index	Peoples Development Index
District	Early 2000s	Late 2000s	Early 2000s	Late 2000s	Early 2000s	Late 2000s
Lohardaga	0.21	0.30	0.69	0.96	0.45	0.63
Palamu	0.30	0.33	0.61	0.87	0.46	0.60
Garhwa	0.28	0.32	0.58	0.71	0.43	0.52
Kodarma	0.36	0.40	0.60	0.63	0.48	0.52
Deoghar	0.35	0.37	0.36	0.57	0.35	0.47
Dumka	0.28	0.35	0.36	0.57	0.32	0.46
Gumla	0.04	0.14	0.50	0.78	0.27	0.46
Chatra	0.22	0.27	0.43	0.59	0.32	0.43
Godda	0.37	0.44	0.18	0.36	0.27	0.40
Sahibganj	0.36	0.27	0.29	0.39	0.33	0.33
Giridih	0.21	0.17	0.46	0.46	0.34	0.31
Pakaur	0.26	0.31	0.39	0.27	0.32	0.29

The District Peoples Development Index is the equally weighted average of the Peoples Infrastructure Index and the Socio-economic Index.
The two sub-indices are estimated on the basis of HDR methodology where the specific variables are aggregated with equal weights and normalized using the range equalization method. (DPI = average SI; SI = average NV; NV = (variable – min(variable))/((max(variable)-min(variable)).

Peoples Infrastructure Index includes the following from District Level Health Survey (DLHS) for 2002-04 and 2007-08 unless otherwise indicated

- Access to toilet facility includes flushed and pit latrine
- Safe water source includes : piped , public tap, hand pump, tube well/bore well, protected well, protected spring
- Percentage of households having electricity connection out of total households.
- Percentage of habitations connected by pucca road. Pucca road is defined as all-weather road which is motorable in all seasons of the year. (PMGSY)

Socio-economic Index includes the following from DLHS unless otherwise indicated

- Children (12-23 months) fully immunized (BCG, 3 doses each of DPT, and Polio and Measles)
- The number of infant deaths in less than a year of births per thousand live births. (Census and Indicus estimates)
- Male literacy rate 7 + years
- Female literacy rate 7 + years

Table A.9: District-wise Objectives for Sustained improvements in Socio-economic Indicators

	Pop. '000s	Male Literacy	Male Literacy	Male Literacy	Male Literacy	Female Literacy	Female Literacy	Female Literacy	Female Literacy	IMR	IMR	IMR	IMR
	2001	2001	2015	2020	2025	2001	2015	2020	2025	2001	2015	2020	2025
Jharkhand	26,945	67	85	90	95	39	60	75	85	62	35	25	20
Garhwa	1,035	54	79	86	93	23	50	68	81	65	37	26	21
Palamu	2,098	59	81	87	94	30	54	71	83	75	42	30	24
Chatra	791	56	80	86	93	30	54	71	83	60	34	24	19
Hazaribag	2,277	72	87	91	96	43	63	77	86	46	26	19	15
Kodarma	499	71	87	91	96	34	57	73	84	46	26	19	15
Giridih	1,904	62	83	88	94	27	52	70	82	56	32	23	18
Deoghar	1,165	66	85	90	95	32	55	72	83	57	32	23	18

	Pop. '000s	Male Literacy	Male Literacy	Male Literacy	Male Literacy	Female Literacy	Female Literacy	Female Literacy	Female Literacy	IMR	IMR	IMR	IMR
	2001	2001	2015	2020	2025	2001	2015	2020	2025	2001	2015	2020	2025
Godda	1,047	58	81	87	94	27	52	70	82	54	30	22	17
Sahibganj	927	48	76	84	92	27	52	70	82	69	39	28	22
Pakaur	701	40	73	82	91	21	48	68	81	56	32	23	18
Dumka	1,759	63	83	89	94	32	56	72	83	47	27	19	15
Dhanbad	2,397	80	91	94	97	52	69	81	88	27	15	11	9
Bokaro	1,777	76	89	93	96	46	65	78	87	37	21	15	12
Ranchi	2,785	77	89	93	96	52	68	80	88	45	25	18	15
Lohardaga	364	67	85	90	95	40	60	75	85	59	33	24	19
Gumla	1,346	64	83	89	94	40	61	75	85	60	34	24	19
Pashchimi Singhbhum	2,082	66	84	89	95	34	57	73	84	54	30	22	17
Purbi Singhbhum	1,982	79	91	94	97	57	72	83	90	36	20	15	12

Source: Base Data from Census 2001/Registrar General of India

Selected List of People Met

Rabindra Kumar Agarwal, *DC Hazaribagh*

Ashok Bhagat, *Vikas Bharti*

Balram, *Member - Right to Food Commission*

Manik Chandra, *Sant Ravidas Kalyan Samiti*

Kamal Nayan Chaubey, *OSD to MoS Health, Government of India*

S.K. Chaudhary, *Development Commissioner*

Dilip Chenoy, *MD & CEO, National Sill Development Corporation*

A.K Chugh, *Secretary Tribal Affairs - Government of India*

Prof Harishwar Dayal, *Department of Economics, St. Xavier's College*

Rajiv Arun Ekka, *Secretary Social Welfare, Women & Child Development*

Devashish Gupta,*Chief Electoral Officer*

Harivansh, *Editor Prabhat Khabar*

Jainandu, *Chairman Jharkhand State Khadi and Village Industries Board*

P.K. Jajoria, *Secretary Urban Development*

Subhendra Jha, *Director Panchayati Raj*

R.C. Kaithal,*Member JPSC*

Dr. (Smt.) Neelima Kerketta, *Secretary Disaster Management*

Lalbiaktluanga Khiangte, *Secretary Tribal Welfare*

S. Kuchroo, *Tata Steel Limited*

Avinash Kumar, *Secretary Planning & Development*

Dhirendra Kumar, *Special Secretary Industries*

District Judge Palamu

Niranjan Kumar, *Additional Finance Commissioner*

Prashant Kumar, *DC Dumka*

Rajeev Kumar, *Resident Commissioner Jharkhand*

Rakesh Kumar, *DC Khunti*

Santosh Kumar, *Secretary Revenue & Land Reforms*

Dr Sunil Kumar, *DC Pakur*

T. Nanda Kumar, *Ex-Secretary Agriculture – Government of India*

Dr S.C. Lahiry,

Roland Lomme, *World Bank*

Sudesh Mahto, *Deputy Chief Minister*

Anup T Mathew, *SP Palamu*

Mast Ram Meena, *DC Deogarh*

S. Meena, *Secretary Transport*

Megnanth

P.C. Mishra

Pankaj Kumar Mishra, *Joint Secretary Planning*

Ramkrishna Mission

Dr Ram Dayal Munda, *Rajya Sabha Member & Member National Advisory Council*

B. C. Nigam, *Special Secretary Water Resources*

Himani Pandey, *DC East Singhbum*

N.N. Pandey, *Secretary Energy*

R.S Poddar, *Secretary Water Resources*

Ramesh Chandra Prasad, *Chief Engineer Energy*

Sudhir Prasad, *Secretary Drinking Water & Sanitation*

Pooja Singhal Purwar, *DC Palamu*

R.K Purwar, *DC Latehar*

Manoj Rai, *PRIA*

Saryu Rai, *Ex MLA*

A.K. Rastogi, *Special Secretary Revenue & Land Reforms*

Prof Bharat Ramaswami, *Indian Statistical Institute*

Dr Manish Ranjan, *Director Industries*

Sati Sahni, *Resident Commissioner Jammu & Kashmir*

Vasavi Santosh, *Member National Commission for Women*

A.K. Sarkar, *Secretary Health, Forest*

A.K. Sengupta,*JPSC Chairman*

Prof Ramesh Sharan, *Ranchi University*

Ashok Kumar Sharma,

R.S. Sharma, *Director General UIDAI*

Sompal Singh Shastri, *Ex-Member Planning Commission and Minister of State Agriculture*

S.K. Shatpathy, *Secretary Rural Development & Panchayati Raj*

Sanjay Kumar Srivastava, *Additional Commissioner Commercial Taxes*

Anil Kumar Sinha, *Advocate General Jharkhand*

Anirudh Kumar Sinha, *Under Secretary Planning & Development*

Mridula Sinha, *Secretary Human Resource Development*

N. N. Sinha, *Secretary Road Construction, Mining*

A.P. Singh,*Secretary Industries, Information Technology*

A.K. Singh, *Chief Secretary*

Arun Kr. Singh, *Secretary Agriculture*

Arun Kr. Singh, *Principle Chief Forest Conservator*

Arun Kumar Singh, *SP West Singhbum*

Jaikant Singh, *National Sill Development Corporation*

Satendra Singh, *Transport Commissioner*

Kamal Kishore Soan, *DC Ranchi*

Hemant Soren, *Deputy Chief Minister*

K. Srinivasan, *DC West Singhbum*

D.K. Tiwari, *Principal Secretary to CM*

Hemant Toppo, *SP Dumka*

Praveen Kumar Toppo, *Tribal Welfare Commissioner*

Jyoti B. Tubid, *Secretary Home*

R.V. Verma, *Chairman National Housing Board*