

Sectoral Polices - A Study of the Power Sector in Telangana

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Introduction:

The power sector occupies a central position in the development strategy of modern economies, as electricity is an essential input for industrial growth, agricultural productivity, and the overall improvement of living standards. In India, access to affordable and reliable electricity is not only viewed as an economic necessity but also as a social obligation of the State. Consequently, power sector policies have evolved as a crucial component of public policy, reflecting broader objectives of social justice, equity, and inclusive growth.

The Indian Constitution, particularly through the Directive Principles of State Policy, provides the normative framework for state intervention in key infrastructure sectors such as electricity. Articles related to social welfare, equitable distribution of resources, and improvement of living conditions justify government action in ensuring universal access to power, especially for vulnerable and economically weaker sections. Within this constitutional context, electricity has increasingly been treated as a public good rather than a purely commercial commodity.

Telangana, since its formation as a separate state in 2014, has accorded high priority to the power sector as an instrument of socio-economic transformation. The state inherited significant challenges in terms of power shortages, infrastructural gaps, and financial stress in distribution utilities. In response, the Government of Telangana adopted a welfare-oriented and interventionist approach, emphasizing capacity addition, distribution reforms, and subsidised or free electricity for key sectors.

A distinguishing feature of Telangana's power sector policy is the provision of free electricity to agriculture and concessional or free power to domestic consumers, particularly low-income households. These initiatives are aimed at reducing energy poverty, supporting farmers' livelihoods, and promoting rural development. At the same time, Telangana has aligned its policies with national power sector reforms and renewable energy targets, thereby contributing to India's broader energy transition.

Against this background, the present study examines the sectoral policies of the power sector in Telangana, with specific reference to constitutional principles, welfare schemes, and their implications for development and sustainability. The paper seeks to analyse how power sector policies in Telangana reflect the intersection of social welfare objectives and economic governance within the Indian federal framework.

1. Directive Principles of State Policy and the Power Sector:

The Directive Principles of State Policy (DPSP), enshrined in Part IV of the Constitution of India, constitute the moral and philosophical foundation of the Indian welfare state. Although non-justiciable in nature, these principles serve as guiding norms for public policy formulation and implementation, particularly in sectors that have a direct bearing on social and economic development. The power sector, being a critical infrastructure service, is closely aligned with the objectives articulated in the DPSP.

Article 38 of the Constitution directs the State to promote the welfare of the people by securing a social order based on justice—social, economic, and political. Access to electricity is indispensable for achieving this objective, as it enables productive employment, education,

healthcare, and improved living conditions. Similarly, Article 39(b) and (c) emphasise the equitable distribution of material resources and the prevention of concentration of wealth, thereby justifying state intervention to ensure that electricity is accessible and affordable to all sections of society.

Further, Article 41 obligates the State to make effective provisions for public assistance in cases of economic need, while Article 47 assigns the State the responsibility of raising the standard of living and improving public health. Reliable electricity supply is fundamental to fulfilling these mandates, as it supports agricultural livelihoods, public health infrastructure, drinking water systems, and educational institutions. Consequently, policies such as subsidised tariffs, free power to farmers, and concessional electricity to economically weaker households derive constitutional legitimacy from these principles.

In the context of the power sector, the DPSP provide a strong normative justification for treating electricity as a social good rather than merely a commercial commodity. State governments, including Telangana, have operationalised these principles through welfare-oriented electricity policies aimed at reducing energy poverty and regional disparities. Thus, the DPSP continue to influence power sector reforms in India by balancing economic efficiency with social equity and inclusive development.

2. Evolution of the Power Sector in Telangana:

The evolution of the power sector in Telangana is closely linked to the state's formation in 2014 and the subsequent restructuring of electricity generation, transmission, and distribution systems. Prior to bifurcation, the Telangana region faced persistent power shortages, uneven distribution of electricity, and limited control over generation resources. These challenges adversely affected agricultural productivity, industrial growth, and the quality of domestic power supply, thereby constraining regional development.

Following the formation of Telangana, the state government identified the power sector as a priority area for governance and economic revival. Institutional restructuring was undertaken with the establishment of state-specific power utilities responsible for generation, transmission, and distribution. The government adopted a comprehensive approach that combined capacity augmentation, infrastructure development, and regulatory reforms to address supply deficits and improve system reliability.

Significant investments were made in expanding generation capacity through thermal, hydro, and renewable energy projects. Large-scale thermal power projects were initiated to ensure base-load stability, while solar and other renewable energy initiatives were promoted to diversify the energy mix and reduce dependence on conventional fuels. These efforts contributed to a gradual transition from a power-deficit state to a relatively power-surplus position.

Parallel to generation expansion, emphasis was placed on strengthening transmission and distribution networks to reduce technical losses and enhance supply quality. Rural and urban electrification programmes were accelerated, with a focus on feeder separation, metering, and grid modernisation. Regulatory oversight and tariff rationalisation were also strengthened to improve the financial performance of distribution companies.

Overall, the evolution of the power sector in Telangana reflects a shift from scarcity-driven management to welfare-oriented and development-focused policy intervention. The state's experience demonstrates how targeted investments, institutional reforms, and political commitment can transform the power sector into a key instrument of socio-economic development.

3. Free and Subsidised Power Schemes in Telangana:

Free and subsidised electricity schemes form a core component of Telangana's sectoral power policies, reflecting the state's welfare-oriented approach to governance. These schemes aim to reduce energy poverty, support agricultural livelihoods, and ensure access to essential services, in line with the Directive Principles of State Policy. Telangana's power subsidies are among the most extensive in India, both in terms of coverage and fiscal commitment.

Free Power to the Agricultural Sector

The provision of free electricity to agriculture is the most significant welfare intervention in Telangana's power sector. The state supplies free and continuous power to agricultural consumers, covering irrigation pump sets across rural areas. This policy primarily targets small and marginal farmers, who constitute a large proportion of the agrarian population.

As per government estimates, over 24 lakh agricultural electricity connections are covered under the free power scheme. The state supplies electricity for irrigation without tariff charges, with power availability extending up to 24×7 supply in many regions. The annual subsidy burden for agricultural free power is estimated to exceed ₹10,000–12,000 crore, making it one of the largest components of the state's power subsidy expenditure.

The scheme has significantly reduced the cost of cultivation, improved groundwater extraction for irrigation, and enhanced cropping intensity. However, it has also increased electricity consumption in agriculture, raising concerns related to energy efficiency, groundwater depletion, and financial stress on distribution companies.

Free and Subsidised Power to Domestic Consumers (Gruha Jyothi)

To address household energy poverty, the Government of Telangana introduced the Gruha Jyothi scheme, which provides free electricity up to 200 units per month for domestic consumers. The scheme is designed to benefit low-income and lower middle-income households by reducing their monthly electricity expenditure.

Approximately 90–95 percent of domestic electricity consumers in the state fall within the eligible consumption range, translating to nearly 1.1–1.2 crore households. The annual financial implication of the Gruha Jyothi scheme is estimated at around ₹4,000–5,000 crore, depending on consumption patterns and tariff revisions.

By linking free power to consumption limits, the scheme attempts to balance welfare objectives with responsible energy use. It has played a crucial role in improving household welfare, particularly for below-poverty-line and economically weaker sections, while reinforcing the state's commitment to inclusive development.

Subsidised Power to Other Priority Sectors

In addition to agriculture and domestic consumers, Telangana extends concessional electricity tariffs to several priority sectors. These include:

- Micro, Small and Medium Enterprises (MSMEs),
- Public institutions such as government schools, hospitals, hostels, and anganwadi centres,
- Drinking water supply and sanitation systems, and
- Local bodies and welfare institutions.

These sectors together account for a substantial share of subsidised electricity consumption. The subsidy support to non-domestic priority sectors is estimated to cost the state exchequer approximately ₹1,500–2,000 crore annually. The rationale behind these concessions

is to promote employment generation, ensure uninterrupted public service delivery, and improve health and sanitation outcomes.

While these subsidies have positive socio-economic effects, they contribute to the overall subsidy burden and necessitate regular budgetary support to distribution companies to maintain operational viability.

Table 1: Free and Subsidised Power Schemes in Telangana

Scheme / Sector	Beneficiaries	Units / Supply Coverage	Estimated Annual Subsidy Amount
Free Power to Agriculture	~24 lakh agricultural connections (mainly small & marginal farmers)	Free electricity for irrigation pumps; up to 24x7 supply in many regions	₹10,000 – ₹12,000 crore
Gruha Jyothi (Domestic Consumers)	~1.1 – 1.2 crore households (~90–95% of domestic consumers)	Free power up to 200 units per month per household	₹4,000 – ₹5,000 crore
Subsidised Power to MSMEs	Small and micro enterprises across urban and semi-urban areas	Concessional tariffs based on consumption slabs	₹500 – ₹700 crore
Public Institutions (Schools, Hospitals, Hostels)	Government institutions and welfare establishments	Subsidised / priority supply	₹600 – ₹800 crore
Drinking Water & Sanitation Services	Urban local bodies and rural water supply agencies	Continuous subsidised power for pumping and treatment	₹400 – ₹500 crore
Total (Approximate)	Over 1.5 crore consumers	—	₹16,000 – ₹18,000 crore

(Source: Compiled from Government of Telangana policy statements, power sector white papers, and budget estimates).

Collectively, free and subsidised power schemes in Telangana benefit over 1.5 crore consumers across agriculture, domestic, and institutional categories, with the total annual power subsidy exceeding ₹16,000–18,000 crore. These schemes demonstrate the state’s commitment to welfare-oriented sectoral policy but also highlight the need for careful fiscal management, improved targeting, and complementary energy-efficiency measures to ensure long-term sustainability.

4. Power Sector Schemes and Initiatives in Telangana:

The Government of Telangana has implemented a wide range of schemes and initiatives aimed at strengthening the power sector across generation, transmission, distribution, and renewable energy segments. These initiatives reflect a balanced approach that combines welfare objectives with infrastructure development and long-term energy security. State-level interventions have been complemented by centrally sponsored schemes, creating a comprehensive policy framework for power sector development.

Generation Capacity Expansion Initiatives

One of the primary priorities of Telangana's power sector policy has been the expansion of generation capacity to ensure adequacy and reliability of supply. The state undertook major investments in thermal power projects to address base-load requirements, alongside accelerated development of renewable energy sources.

Large thermal projects were initiated under state utilities to reduce dependence on external power purchases and ensure grid stability. At the same time, Telangana promoted solar and wind power through large-scale solar parks and private sector participation. These initiatives have enabled the state to move from a power-deficit position to a relatively power-surplus status, particularly during non-peak seasons.

Transmission Infrastructure Development

Strengthening transmission infrastructure has been a key component of Telangana's power sector reforms. The state focused on expanding high-voltage transmission lines and substations to support increased generation capacity and facilitate reliable power flow across regions.

Investments were made to improve inter-district and inter-state connectivity, enabling efficient evacuation of power from generation centres to load points. Transmission upgrades have also supported the integration of renewable energy into the grid, reducing congestion and transmission losses.

Distribution Reforms and System Strengthening

Distribution sector reforms have received sustained attention due to their direct impact on service delivery and financial performance. Telangana implemented measures to reduce Aggregate Technical and Commercial (AT&C) losses through network strengthening, improved metering, and enhanced billing and collection mechanisms.

Urban and rural distribution systems were upgraded under both state initiatives and centrally sponsored programmes. Feeder separation for agricultural and non-agricultural consumers was undertaken to improve supply reliability and facilitate better load management. These reforms contributed to improved quality of power supply and consumer satisfaction.

Renewable Energy Promotion and Solar Initiatives

Renewable energy promotion constitutes a major pillar of Telangana's power sector strategy. The state actively encouraged solar power generation through policy incentives, land facilitation, and grid connectivity support. Rooftop solar installations were promoted for households, public institutions, and government buildings.

Solar pump schemes were introduced for agricultural irrigation to reduce dependence on grid electricity and promote sustainable water and energy use. These initiatives align Telangana's power sector with national renewable energy targets and climate commitments.

Implementation of Central Power Sector Schemes

Telangana has effectively implemented several central government schemes aimed at improving electricity access and infrastructure. Key programmes include rural electrification initiatives, urban distribution strengthening schemes, and household electrification drives.

These schemes have played a significant role in expanding electricity access, modernising distribution networks, and improving service reliability. Coordination between state agencies and central institutions has enhanced the overall effectiveness of these initiatives.

Institutional and Regulatory Initiatives

Institutional strengthening and regulatory oversight form an integral part of Telangana's power sector governance. Independent regulation through the state electricity regulatory commission has facilitated tariff determination, subsidy accounting, and consumer protection.

Policy initiatives have also focused on improving transparency, accountability, and operational efficiency of power utilities. Regulatory measures related to renewable purchase obligations, grid standards, and tariff rationalisation have contributed to a more structured and predictable policy environment.

The power sector schemes and initiatives in Telangana reflect a comprehensive and multi-dimensional policy approach encompassing infrastructure development, welfare provisioning, and sustainability objectives. While these initiatives have significantly improved power availability and access, their long-term success depends on continued investment, financial discipline, and adaptive regulatory reforms. Telangana's experience offers valuable insights for other Indian states seeking to balance social welfare goals with efficient power sector management.

5. Telangana in the National Power Sector Context:

The power sector policies of Telangana must be understood within the broader framework of India's national electricity reforms, which seek to balance universal access, financial sustainability, and environmental responsibility. At the national level, the Indian power sector has undergone significant transformation since the Electricity Act, 2003, with an emphasis on competition, private participation, independent regulation, and reduction of distribution losses. These reforms are guided by policy directions issued by the Ministry of Power, along with national commitments to renewable energy expansion and climate change mitigation.

In this national context, Telangana presents a distinctive model characterised by a strong welfare orientation. While many Indian states have adopted targeted subsidies or partial tariff support, Telangana has implemented large-scale free power schemes for agriculture and domestic consumers. This places the state among those prioritising social equity and livelihood protection over strict cost-reflective pricing, thereby reinforcing constitutional welfare objectives embedded in the Directive Principles of State Policy.

From a comparative perspective, Telangana's emphasis on continuous free agricultural power distinguishes it from several other states that continue to provide limited-hour supply or partial subsidies. This approach has contributed to improved irrigation access and agricultural productivity, aligning with national goals of food security and rural development. However, it also intensifies challenges faced across India, such as rising subsidy burdens, financial stress on distribution companies, and concerns over energy efficiency.

In terms of renewable energy, Telangana's policies are broadly aligned with India's national energy transition agenda. The state's promotion of solar power, rooftop installations, and renewable integration supports India's commitments to expanding non-fossil fuel capacity and reducing carbon intensity. Telangana's experience demonstrates how sub-national governments can contribute meaningfully to national climate and sustainability objectives.

Overall, Telangana's power sector reflects both convergence and divergence with national trends. While infrastructure development, renewable promotion, and regulatory alignment conform to national policy directions, the scale of welfare-oriented electricity provisioning represents a distinctive state-level policy choice. Telangana thus serves as an important case study within the Indian federal system, illustrating the opportunities and tensions

inherent in reconciling welfare-driven sectoral policies with national power sector reforms and fiscal sustainability goals.

Conclusion:

The analysis of sectoral policies in the power sector of Telangana reveals a governance model that places social welfare, equity, and inclusive development at the centre of electricity policy. Guided by the constitutional ideals enshrined in the Directive Principles of State Policy, the Government of Telangana has treated electricity not merely as a commercial service but as an essential public good. This approach has enabled the state to address long-standing regional disparities in power access and reliability.

Telangana's power sector reforms demonstrate strong political commitment through sustained investments in generation capacity, transmission infrastructure, and distribution system strengthening. The provision of free and continuous power to the agricultural sector has significantly supported farmers by reducing cultivation costs, improving irrigation access, and enhancing rural livelihoods. Similarly, welfare-oriented initiatives such as the Gruha Jyothi scheme have played an important role in reducing household energy poverty and improving living standards for economically weaker sections.

The state's proactive promotion of renewable energy, particularly solar power, reflects alignment with national energy transition goals and environmental sustainability objectives. Effective implementation of central schemes alongside state-specific initiatives further underscores Telangana's administrative capacity and cooperative federal approach to power sector development.

While challenges related to fiscal sustainability and efficiency persist, Telangana's power sector policies represent a progressive and people-centric model of governance. The state's experience highlights how targeted welfare measures, institutional reforms, and infrastructure development can collectively transform the power sector into a catalyst for socio-economic growth. Overall, the Government of Telangana's initiatives in the power sector offer valuable lessons for other Indian states seeking to balance welfare objectives with sustainable and resilient energy systems.

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