

Real

GDP growth moderated from an average of 7.4 percent during FY15/16-FY18/19 to an estimated 4.0 percent in FY19/20.¹ The growth deceleration was mostly due to (i) shocks to the financial sector, and (ii) decline in private consumption growth.² Against this backdrop of pre-existing weaknesses, the outbreak of COVID-19 had a significant impact, with real GDP contracting by 7.3 percent in FY20/21.³ On the fiscal side, the general government deficit widened significantly in FY20/21, owing to higher spending and low revenues.⁴ Given the significant uncertainty pertaining to epidemiological developments, real GDP growth for FY21/22 is likely to be in the range of 7.5 to 12.5 percent.⁵

However, recent projections of GDP per capita growth, taking into account the impact of the pandemic, suggest that poverty rates in 2020 have likely reverted to estimated levels in 2016.⁹

In the State of Himachal Pradesh, which the proposed project would support, economic growth has slowed in line with national trends.

Safeguarding existing water and sanitation services, and rebuilding better to improve their quality, reliability and coverage, is critical to contain the pandemic and to recover from it.

In line with national trends, the state of Himachal Pradesh has experienced rapid economic growth, a decline in poverty and fast urbanization.

The WSS sector challenges continue to be severe, including weak institutions; a focus on infrastructure creation rather than service delivery; intermittent supply against rapidly increasing demand in the tourist towns; flat tariffs and gaps in metering; inadequate monitoring of water quality and systems for grievance redressal; growing stress on dependable, perennial and sustainable water supply sources; inadequate upgrading and augmentation of existing WSS schemes; and low cost recovery and heavy reliance on subsidies from GoHP, including high energy costs.

Prior to the onset of COVID-19, the company had completed three cycles of metered volumetric billing, nearly tripling its revenues.

GoHP has put in place the key pillars of WSS utility reforms including integration of WSS functions under a single company governed by a Board of Directors (BoD) with full autonomy and enabling policies for performance orientation, professional organisation structure, engaging with private sector, and funding commitment for a medium term investment plan.

Although confidence of citizens and elected representatives has improved, there is need for improving services beyond what was achieved in managing the 2018 water crisis.

SJPNL is now focusing on citywide improvement in WSS service including 24/7 supply, increased coverage in sewerage facilities from 60% to 100%, and treatment of 100% of wastewater, reducing GHGs, including methane capture and sludge management. Given the high bulk water costs in Shimla, the SJPNL needs to reduce water loss and energy consumption to control costs, improve revenue and maintain subsidies within the levels committed by GoHP.

It needs to build on these initiatives for improving WSS services and strengthening efficiency, sustainability and customer accountability.

These are: a) developing SJPNL as a well governed professional WSS utility with systematic business planning, corporate governance and performance focus, b) increasing operational efficiency, including energy efficiency, NRW reduction with associated GHG emissions reductions, smart metering, collection efficiency, tariff revision, and customer accountability, and c) improving services to deliver citywide 24/7 water supply and 100% sewerage coverage and treatment.

Mobilizing Finance for Development: The proposed operation will support public sector reforms, including improving operational and financial sustainability of services through an autonomous and accountable WSS Company and thus strengthening its capacity to improve services. This will gradually improve the creditworthiness of the WSS Utility and enhance the chances of mobilizing market funds and future private financing.

Objectives of the WSS MTP: The MTP aims to improve WSS services with the goals of universal coverage of safe water supply and sanitation services, continuous pressurized water supply, accountability and responsiveness to citizens, and decentralized service delivery through autonomous and professional institutions.

The GoHP will provide grants to meet the capital expenditure required to achieve the service standards, focusing on policy and institutional reforms for improving governance, increasing efficiency of WSS operations, and increasing customer orientation and accountability.

It has supported the improvement and augmentation of existing water supply schemes from catchments areas, adding capacity to the water treatment plants, renovating the water supply network and increasing sewerage network connectivity in the city.

With support from the proposed PforR, the first phase of the MTP in Shimla will continue until 2026, assisting SJPNL during the COVID-19 pandemic and deepening the reforms and service improvements already introduced. In the future phases of the MTP the GoHP will extend the MTP to economically important urban clusters in the rest of Himachal Pradesh.

The Theory of Change posits that effective, autonomous WSS institutions, embedded in a policy framework that incentivizes efficiency, accountability and performance, are critical to improve WSS services.

As reflected in the theory of change (Figure 1 below), the proposed PforR seeks to improve on this by complementing infrastructure inputs with appropriate policies, institution building, regulation, and accountability measures.

Moreover, the PforR support will focus on Shimla city, whereas the ultimate ambition of the WSS MTP is to introduce reforms and improved services across the state (Table 1).

The three results areas are: a) Improved governance, managerial and financial autonomy; b) Improved efficiency, financial sustainability, and customer accountability; and c) Improved water supply and sewerage services.

Results Area 1: Improved governance, managerial and financial autonomy of SJPNL: The SJPNL will solidify best practice business planning and corporate governance, introduce performance incentives for staff and contractors, and further improve its organizational structure, inclusiveness, managerial and financial autonomy. Specifically:

(a) Strategic Business Planning and Corporate Governance Practices

(i Under the PforR, the SJPNL will develop a Strategic Business Plan, including a Performance Improvement Plan, to help meet operational, commercial, and financial WSS performance targets.

(b Introducing Performance Incentives: SJPNL will introduce performance incentives for both staff and contractors:

(i GoHP and SMC has authorised SJPNL to develop a performance incentive policy for its employees

SJPNL wil

enter into performance-based contracts with private operators which will include targets for service delivery and operational efficiency (e.g.

Results Area 2: Improved efficiency, financial sustainability, and customer accountability: WSS services in Shimla are one of the most expensive in India, since bulk water is pumped up over 1400- 2000 meters elevation.

initiatives to achieve the agreed results:

Under the PforR, the SJPNL will build on these

- (a) Energy efficiency improvement and NRW reduction: The energy consumption per unit of water distributed will improve by 20 percent, that is, from 13 KWH of energy consumption per kiloliter (KL) of water delivered at the balancing reservoir to 10.4 KWH per KL, through a package of electrical and hydraulic measures in bulk water pumping and transmission under the Government program.
- (b) Commercial and financial improvements: The GoHP subsidizes WSS services at present and has committed to continue the subsidies since bulk water is expensive in Shimla and full O&M cost recovery is not considered possible.

Automatic annual indexation of tariff along with incentives for improving operational efficiency will increase O&M cost recovery to above 50% in 2026 as compared to 21% at present and increase intra-city O&M cost recovery from 120% at present to 175% by the end of the Program.

The GoHP has issued performance standards for WSS, based on which SJPNI has finalised a performance scorecard which will evaluate SJPNI on a) customer service, b) financial performance and efficiency, c) organizational processes and modernization, and d) implementation of the investment plan.

Under the proposed Program, the SJPNL will provide safely managed and improved WSS services targeting 24/7 supply for all residents and 100% coverage with sewerage network.

sewerage network.

SJPNL will also expand the

Under the PforR Program, SJPNL will organize technical workshops and information dissemination campaigns for women entrepreneurs, women-owned businesses to encourage bids from localized women business owners for the water supply and sewer network to be added in uncovered areas.

- (b) Digitalization of WSS management systems: To improve service quality and asset management, the PforR will support SJPNL to digitize its WSS management systems.

In addition, SJPNL will build critical digital assets using geospatial data like a Geographic Information System (GIS)-linked customer database, asset database, billing and collection database, IT applications for accounting, costing and budgeting and customer relations.

Table 2: Program Financing Summary

Source	Amount (USD milion)	% of Total
International Bank for Reconstruction and Development (IBRD)	160	64
Government of Himachal Pradesh (GoHP)	90	36
Total Program Financing	250	100

D . Program Development Objective(s) (PDO) and PDO Level Results Indicators

33. The PDO is to strengthen the operational and financial performance of the SJPNL Utility and improve access to water supply and sewerage services in Shimla City.

- (b) SJPNL achieves operational efficiency and financial sustainability: (i) SJPNL improves energy efficiency by 20%; (ii) SJPNL reduces Non-Revenue-Water by 15%; (iii) O&M Cost Recovery in water distribution is at least 175%; and
- (c) Number of people benefitting from improved WSS services (i) Number of people having access to continuous water supply; (ii) Number of additional people provided with sewerage services.

The DLIs reflect the core priorities of the WSS reform program in Himachal Pradesh and provide incentives to deepen the governance and performance improvements achieved by SJPNL over the past two years. The DLI#1 supports corporate governance and performance orientation in SJPNL, while DLIs #2 to #6 incentivize crucial aspects of utility performance, notably operational efficiency and financial sustainability.

Reduction in NRW will also increase revenue and decrease the requirement for GoHP subsidies

billing and collection are also needed to improve revenues.

In addition to these, efficient

It is planning to strengthen its implementation capacity by entering into performance-based contracts with the private sector for intra-city water supply and sewerage service improvement program.

Of the total PforR amount of US\$ 160 million, 12% is allocated to Result Area 1 (DLI # 1) on improved governance, managerial and financial autonomy of SJPNL, 58% to Result Area 2 (DLIs #2 to #6) on improvements in operational efficiency, financial sustainability, and customer accountability, and 30% to Result Area 3 (DLI#7) on improved water supply and sewerage services.

distribution network extensions); (ii) carry out O&M of its systems including professional asset management; (iii) adopt techniques and strategies to reduce non-revenue water; (iv) monitor and manage water and effluent quality; (v) achieve Operational and Energy Efficiency; (vi) manage Digital Tools to improve utility management (GIS, SCADA etc.

This institutional study outlined a pathway to reform including corporatization, ownership and management options, clustered development, a cost recovery roadmap and regulatory mechanism . T

Financial Analysis: The Program supports SJPNL in strengthening its financial autonomy with a roadmap for improving O&M cost recovery through tariffs and committed subsidies for bulk water.

The financial analysis shows that while the WSS O&M costs projected in FY 26 in the absence of efficiency measures are double the costs in FY 20, the Program incentivizes several operational efficiency improvements, including reduction of NRW by 15% and energy efficiency improvements by 20%, thus moderating the water production requirements and the cost of production.

Economic Analysis: The Program is expected to provide significant economic benefits through policy and institutional development reforms and WSS service delivery improvements. Based on a detailed benefit-cost analysis, the Economic Rate of Return (ERR) for the Program is estimated at 25.3%.

(ii) Benefits due to incremental water supply: With the Program interventions, the availability of treated and potable water in Shimla is expected to increase from 40 MLD currently to 60 MLD by 2030 and 107 MLD by 2050.

The hotels and commercial connections serve the annual tourist population of 3.2 million in FY20, which is estimated to increase to 5 million in FY50.

The sensitivity analysis indicates that the Program can absorb 20% increase in total costs (capex + opex) and 20% in overall benefits and yet result in a positive ERR of 13%.

The ERR is a conservative estimate since benefits that are more difficult to quantify have been included, such as benefits from strengthening the SJPNL institution, policy and M&E systems, customer accounts and grievance redressal mechanism, etc.

The FSA is focused on determining whether the government systems provide reasonable assurance that Program funds will be used for the intended purposes and that principles of economy, efficiency, effectiveness, transparency, and accountability will be maintained.

The Program will involve civil works such as laying and repair of water supply distribution, sewage disposal pipeline networks, water quality labs, storage tanks and resource center.

This is particularly the case in view of the ambitious nature of the overall GoHP WSS MTP which aims for the ultimate scale-up of the WSS institutional reforms and SJPNL service delivery to additional towns.

SJPNL is hiring a

finance manager and improving financial management systems.

onwards.

This allowed economic activity to resume from the second quarter (July to September 2020)

Growth is expected to rebound in FY21/22 (within a range of 7.5-12.5 percent), but there is considerable uncertainty around the trajectory of future waves of COVID-19. The sharp economic slowdown has affected revenues disproportionately with general government revenues declining by over 10 percent in FY20/21.

In the second phase, GoI invested \$23 billion in social protection program to support the poor and vulnerable communities during the lockdown, and the Bank provided financing of \$1.15 billion.

The Japanese International Cooperation Agency (JICA), Asian Infrastructure Investment Bank (AIIB), the New Development Bank (NDB) and International Fund for Agriculture (IFAD) are also exploring potential parallel financing in upcoming operations.

The PDO is to strengthen the operational and financial performance of the SJPNL Utility and improve access to water supply and sewerage services in Shimla City.

The survey would focus on (a) access to water supply and sewerage services, (b) water quality and quantity, (c) reliability and affordability, (d) customer service related to WSS services, and (e) willingness to use e-services.

In order to implement its vision and water policy, the GoHP in 2018 laid out a roadmap for sector reforms and notified a WSS MTP for improvement of WSS service.

Energy efficient operations
Under the MTP, the SJPNL will increase energy efficiency measures and will target to reduce unit cost (KwH/ m3) by at least 10% by 2025.

It supports financing of the bulk water supply and distribution system for Shimla city including NRW reduction program, SCADA and automation, sewerage system, O&M program, M&E system, GRM, and capacity building activities.

The PforR operation (US\$ 250 million), comprising US\$160 million of IBRD financing and US\$90 million of GoHP financing, aims at improving the WSS distribution system for moving to 24/7 supply and 100% sewerage connections, along with improvements in operating efficiency, financial sustainability, and customer accountability in Shimla city. Investments are supported by commitments towards sustainable O&M of WSS services in Shimla city recognizing the high cost of bulk water.

Expenditure financed by PforR: The expenditure program for the PforR operation will support category B (low risk investments) for water quality monitoring and improving distribution system in Shimla city through upgrading and expanding existing distribution system, including small pumping systems, pipe networks, storage tanks, SCADA and automation, digitization, and customer connections.

The PforR operation supports service delivery improvements by improving the water supply distribution system and expanding sewerage networks in Shimla city. This includes upgrading and expanding the existing distribution system, including small pumping systems, pipe networks, storage tanks, SCADA and automation, digitization, and customer connection.

Digital assets will be created covering customer database, geospatial data, infrastructure, finance, billing and collection and customer service data.

(vi) Sewerage Services: The Program will provide sewerage connectivity to unserved areas through expansion of existing networks and increasing coverage from 60% to 100% through household and commercial connection. The Program will (a) expand the existing network to Panthaghati, Dhalli 2 and Mashobra unserved areas of Shimla City; and (b) extend the network in already served areas to the unconnected residents. The expansion and extension will help achieve 100% sewerage coverage in Shimla city.

It will a) Improve governance, managerial and financial autonomy of SJPNL, b) Improve efficiency, financial sustainability and customer accountability, and c) Improve water supply and sewerage services in Shimla city.

The SJPNL will develop its Strategic Business Plan including corporate strategic focus and priority areas, and key performance indicators on quantity and quality of water, billing and collection, cost recovery, NRW, etc.

The Program will incentivize the strengthening of performance policies, managerial and financial autonomy, efficient operations and financially sustainable services.

SJPNL will strengthen and implement the performance-based contracts with private operators, with incentives linked to achievements of the related performance indicators. Financial autonomy of SJPNL will be strengthened by timely tariff revisions and increase in revenue earnings.

(b) Result Area 2: Improved efficiency, financial sustainability, and customer accountability

continuous water supply and sewerage services

The Program will incentivize city-wide coverage with 24

The Program

supports sustained economic contribution from the tourism sector

This institutional study outlined a pathway to reform including corporatization, ownership and management options, clustered development, a cost recovery roadmap and regulatory mechanism

The Program focuses both on service outcomes and the enabling environment: The results target the next level governance requirements, such as a) business planning and performance improvement, b) performance orientation within SJPNL, and c) exercising the autonomy provided to SJPNL

which are in line with the GoHP policies and performance standa

The Program now sets quantitative targets for efficien

SJPNL also has the freedom to enter into performance-based contracts with priva
sector to achieve these results, which are already in procurement sta

This partnership provides SJPNL with guidance on strategic planning and creating modern WSS utility systems within SJPNL, including advice on contract management

The organization has achieved a higher score on the maturity rating on Commercial Operations (metering and establishing a tariff policy), Corporate Governance, Strategic Leadership (structure of the BoD and providing a tenure to the MD cum CEO, etc)

The Program supports SJPNL in strengthening its financial autonomy with an efficient tariff structure and committed subsidies for bulk water.

The Program improves bulk water availability by 33%, increase in water supply from 2 hours daily to 24/7 supply city-wide, increase in sewerage coverage by 40% and wastewater treatment volume by 2.5 times.

Revenue collection improves as a result of the new tariff and subsidy policy.

The operational improvements and the new tariff and subsidy policy stabilize the finances of SJPNL.

without efficiency improvements and tariff policy, the WSS O&M cost recovery falls from 21% in FY20 to 14.4% in FY26, mainly due to increasing costs of bulk water supply and wastewater treatment.

Under this scenario, the WSS O&M cost recovery improves rapidly to 40.2% by FY26 mainly due to NRW reduction, energy efficiency improvements and annual tariff revision.

The Program has a strong economic rationale with an ERR for the Program estimated to be 25.3% due to significant benefits from improvements in WSS service.

The quantifiable direct and indirect benefits due to the proposed Program interventions are: (i) Benefits due to reduction in operational costs - reduction in NRW and improvements in energy efficiency leading to savings in O&M cost; (ii) Benefits due to incremental water supply - availability of water supply is expected to increase from 40 MLD in FY 2020 to 107 MLD in 2050; (iii) Benefits due to savings in coping cost - reduction in usage of water tanks especially benefitting the non-domestic customers, including hotels, and reduction in the domestic cost for water storage tanks, water purification systems, etc); (iv) Health benefits from improved water supply - reduction in several diseases - diarrhea, dengue, malaria associated with poor quality of water, valued as the opportunity cost of person days lost due to Disability Adjusted Life Years - DALYs, (WHO estimates 20

The sensitivity analysis indicates that the Program can absorb 20% increase in total costs (capex + opex) and 20% decrease in overall benefits and yet result in a positive ERR of 13%.

The ERR is a conservative estimate since benefits that are more difficult to quantify have not been included, such as benefits from strengthening the SJPNL institution and M&E systems, customer accountability and grievance redressal mechanism

The GSDP of the State at constant prices has increased by 71% from INR 72719.83 crore in 2011-12 to INR 12 crore in 2019-20 (RE) with an average annual growth rate of 7 per ce

However, the Capital expenditure of the state has doubled from 2015-16 2019-20 (RE) with an annual average growth rate of 29% as against 14% in case of Revenue expe

However there has been an increase in capital expenditure over the years, with an average increase of 16% as against increase in revenue expenditure during 2015-2020, as seen below

Table 5: Expenditure on Water Supply and Sanitation				
Year	Revenue Expenditure	Capital Expenditure	Total Expenditure	Percentage change
2015-16	882.1	318.0	1200	8
2016-17	1137.4	392.6	1530	27
2017-18	982.9	461.6	1444	-6
2018-19	1141.4	417.7	1559	8
2019-20 (RE)	1139.5	586.4	1726	11

Source: State Finances: A Study of Budgets, Reserve Bank of India (various years)

42.

The SJPNL has demonstrated significant achievement under DPL-1, showing that performance-based service delivery can be implemented successfully by ensuring contracts are of good quality, based on market sounding and sector experience

The FSA focused on determining whether relevant SJPNL systems provide reasonable assurance that Program funds will be used for the intended purpose and that principles of economy, efficiency, effectiveness, transparency, and accountability will be maintained.

Balance Sheet: At the end of the financial year 2019-20, SJPNL had a fixed asset base of INR 167.51 crores (after depreciation) and receivables of Rs. [REDACTED] It has a paid-up share capital of Rs [REDACTED]

Operations: during the year it generated revenue from water and sewerage charges amounting to INR 26.18 crores.

SJPNL Procurement: Based on the activities identified under the Program, main procurable items are performance based works contracts for bulk water supply and transmission, water distribution lines and storage tanks, NRW reduction, extension of sewerage network, rehabilitation and capacity addition of STPs, and SCADA system, M&E System, GRM, global water utility partnership, and capacity building activities.

SJPNL prepares a six-year investment plan on infrastructure. [€]10

Procurement processes and procedures: SJPNL has put in place a fair and transparent procurement process with the objective of achieving best value for money.

The assessment reviewed procurement performance of SJPNL based on analysis of sample review of 19 contracts with an estimated amount of Rs 340 million [USD 47 million].

As per PRICIS region-specific projections for 2030s, the water yield in Himachal Pradesh, mainly covered by major rivers, is likely to increase by 5% to 20% in most of the areas, with some areas showing an increase of up to 50% with respect to 1970s.

The annual performance score (DLI#6) will provide a general performance incentive covering core aspects of utility performance including (a) Customer Service (30%); (b) Efficiency (20%); (c) Organizational Systems (20%); and (d) Completion of Capital Investment Plan (30%).

