SDG 9: Industry, Innovation and Infrastructure

TARGETS	INDICATORS			
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human	9.1.1 Proportion of the rural population who live within 2 km of an all-season road			
well-being, with a focus on affordable and equitable access for all	9.1.2 Passenger and freight volumes, by mode of transport			
9.2	9.2.1			
Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances,	Manufacturing value added as a proportion of GDP and per capita			
and double its share in least developed countries	9.2.2			
	Manufacturing employment as a proportion of total employment			
9.3	9.3.1			
Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	Proportion of small-scale industries in total industry value added			
	9.3.2			
	Proportion of small-scale industries with a loan or line of credit			
9.4	9.4.1			
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	CO2 emission per unit of value added			
9.5	9.5.1			
Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	Research and development expenditure as a proportion of GDP			
	9.5.2			
	Researchers (in full-time equivalent) per million inhabitants			
9.A	9.A.1			
Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	Total official international support (official development assistance plus other official flows) to infrastructure			
9.B	9.B.1			
Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities	Proportion of medium and high-tech industry value added in total value added			

9.C	9.C.

Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

Proportion of population covered by a mobile network, by technology

Section 1.1 "Inclusive Socio-economic Development"

Reducing Unemployment Rate to Below 4 Percent

- With sustained economic expansion and the implementation of new job creation policies, the unemployment rate will be reduced to below 4 percent.
- A key focus will be on skills development and turning job seekers into job creators.
- With the establishment of the Micro, Small and Medium Enterprise (MSME) Council and Central Coordinating Agency, greater support and incentives will be provided to small and medium enterprises
- New growth sectors with high labour absorption capacity will be nurtured and expanded.
- Seasonal employment opportunities overseas will also be effectively utilised.

Electricity for All

- Ninety percent of the population currently has access to electricity. Electrification
 projects in the rural and maritime areas will be expedited to ensure that the entire
 population has access to electricity by 2021.
- Government will continue to fully fund rural electrification projects, including connections for households near the grid lines



 Future electricity infrastructure projects will be climate resilient, and opportunities for underground cables for electricity distribution will be explored and adopted where feasible

Universal Access to Quality Education

- Universal access to education at all levels will be maintained with a focus on improving the quality of education.
- This will increase the supply of well-trained, world-class professionals who are equipped for job opportunities in the global market.
- new equipment and materials will be implemented, moving towards digital learning and improving teacher performance.
- Tertiary education will be further improved to focus on current and future needs.
- Technical and vocational training for lifelong learning seeking to assist in the creation of technical skills needed by all sectors of the economy



Section 1.2 "Transformational Strategic Thrusts"

Improving Transport and Digital Connectivity

- Greater connectivity is central to transforming Fiji. Transportation networks within the country and connectivity to the outside world will be enhanced.
- We will also continue to modernise Fiji's air, maritime and land transport networks
- Apart from transport connectivity, there will be a major focus on digital connectivity. All
 this will support human capital development, commerce and trade.
- Investment in *road infrastructure* is essential for future growth. Modernising our road infrastructure will continue to support strong economic expansion, rising income levels, the increase in urban population and the growth in agriculture and industries.
- International and domestic airports will be modernised and upgraded to international standards.
- **Port infrastructure** will continue to be modernised, and services will be improved further to facilitate trade and commerce.
- Digital connectivity through high-speed internet networks and broadband access will be improved, and all areas of Fiji will be digitally connected.
- Competition will be enhanced in broadband internet services by making *communication infrastructure* available to multiple users under reasonable terms and conditions.



Nurturing New and Emerging Growth Sectors

- Moving forward, new growth sectors will be nurtured to enable the economy to thrive and create more jobs.
- Development of niche products and services for export will be pursued.
- Including:
 - o organic agricultural produce
 - Agro-processing
 - premium-quality garments
 - Increasing the range of tourism products (sports tourism, cruise tourism, wedding tourism, retirement villages, medical tourism and conference tourism)
 - Filmmaking
 - Regional communications and transport services
 - And many other new sector initiatives.
- Value addition will be further developed in resource-based sectors such as forestry, fisheries and agriculture to support new manufacturing industries.
- Government will provide the necessary infrastructure and enabling services to improve the business climate

Building Vibrant Cities and Towns and a Stronger Rural Economy

- Development will be balanced to ensure the development of both a stronger rural economy and vibrant urban centres.
- To create vibrant urban centres, existing city and town schemes will be reviewed, and new growth centres will be identified and developed.
- Cities will be beautified with development of recreation facilities and parks, urban gardens and better zoning. Traffic management plans will be enhanced to ease traffic congestion.
- Rural development will be prioritised with improvements in infrastructure and provision of adequate public utilities.
- The Ministry of Agriculture will create better linkages to enhance the marketing, promotion and value addition of local agricultural produce.

Transformational Strategic Thrusts	2015	2021	2026	2031	2036
Container port traffic (tonnes)	1,755,6 70 4	1,865, 836 5	TBD	TBD	TBD
Average GDP growth rate in period (%)	3.6	4-5	4-5	4-5	4-5
Income per capita (\$) (SDG 8.1)	10,617		21,233		42,466
Investment (% of GDP) (SDG 17.3)	25	25	25	25	25
Private Sector Investment (% of GDP) (SDG 17.3)	20.9	>15	>15	>15	>15
Public Debt (%of GDP)	48.7	47.7	45	40	35
Unemployment Rate (%) (SDG 8.5)	6.2	4	4	4	4
Merchandise trade (% of GDP)	68.,1	68.6	TBD	TBD	TBD
Tourism earnings (% of GDP) (SDG 8.9)	17	20	TBD	TBD	TBD
Increase in wired and wireless network coverage in Fiji (%) (SDG 9.c)	95	100	100	100	100

FURTHER INFORMATION

What is GDP?

Gross Domestic Product (GDP) provides an economic snapshot of a country, used to estimate the size of an economy and growth rate. GDP can be calculated in three ways, using expenditures, production, or incomes

When a country's **GDP** is **high** it means that the country is increasing the amount of production that is taking place in the economy and the citizens have a **higher** income and hence are spending more. There is an increase in the lifestyle of the citizens and there are more individuals going to college.

Source and more information on GDP:

https://www.investopedia.com/terms/g/gdp.asp#:~:text=Gross%20Domestic%20Product%20(GDP)%20is%20the%20monetary%20value%20of%20all,expenditures%2C%20production%2C%20or%20incomes.

3.2.1 MODERNISING LAND TRANSPORT

"Access to transportation through an efficient and sustainable transport network"

- The government has already embarked on modernising the infrastructure with substantial funding to improve our roads, bridges, jetties, streetlights and footpaths over recent years.
- This includes the four-lane projects connecting Nausori Airport to Suva and Nadi Airport to Denarau.
- In the next 5 years, more investments will be made to further improve our road network.
- A major street lighting programme is being undertaken to replace all faulty streetlights and install new ones with LED lights in both urban and rural areas
- Government will install traffic lights at junctions, develop roundabouts and re-design some of the existing hightraffic roads to ease traffic congestion and make our roads safer.
- To reduce damage to the road network, more weighbridges will be constructed to ensure that shippers comply with the weight limits on our roads and bridges.
- Emission standards and energy efficiency for transport will be a key priority. The
 replacement of existing uneconomical vehicles with hybrid and electric vehicles will be
 supported.
- The use of cycling lanes to promote fuel savings



3.2.2 INTER-ISLAND NETWORK

"Safe, efficient, reliable, and affordable shipping services"

- Given our geographical dispersion, improving interisland sea transportation is essential for livelihood, trade and commerce.
- Over the past years, the number of vessels has increased and the frequency of services has improved.
- Government in the next 5 years will ensure improved inter island transportation in the maritime region
- Incentives for private sector investments in new ships and equipment will continue, together with subsidies for services to uneconomical routes under the franchise scheme.
- Government will also continuously review the subsidy rate, passenger fares and freight charges in line with cost structures.
- Education and training of seafarers and development of other skilled personnel needed by the industry will be strengthened through provision of scholarships and review of the training module by the Fiji Maritime Academy.
- Safety at sea will also be a key priority, with strategies and programmes implemented to raise awareness and regulate and enforce regulations in favour of safety.
- Improve safety and efficiency in the provision of inter-island shipping through:
 - The Maritime Safety Authority of Fiji (MSAF) will ensure compliance with International Maritime Organization (IMO) safety conventions to which Fiji is signatory



Further Information:

Fiji Maritime Academy

A college that trains students how to be ships' officers, located in Suva,

- The Academy's programs allow students to qualify for credentials recognized by the International Maritime Organization
- Fiji Maritime Academy and provision of at least 10 scholarships each year for the next five years to train more seafarers

For more information on the acadamy:

https://www.fnu.ac.fj/maritime/

The Maritime Safety Authority of Fiji (MSAF)

- The prime objective of MSAF is to ensure that highest safety standards are met, MSAF products and services are provided in an efficient manner
- MSAF will ensure the formulation of and implementation of the national strategy for implementation of IMO and International Labour Organization (ILO) maritime instrument

For more information on MSAF:

https://msaf.com.fj/

3.2.3 DOMESTIC AIR SERVICES

"Unlocking our economic potential through consistent and reliable domestic air services"

- Reliable domestic air service is important for improved and efficient domestic connectivity. This is important to allow easier travel for Fijians within Fiji, but also it is for further development of the tourism industry, trade and business
- In the next 5 years, government will allocate funding to upgrade and maintain domestic airports, airstrips, runways and associated facilities
- There are plans for construction of a new airport in Vanua Levu
- To ensure affordability of flight services, government will continue subsidising domestic flights.
- Training and education for aviation professionals like aircraft engineers; pilots and air traffic controllers will be strengthened to meet International Civil Aviation Organization (ICAO) standards

Further Information:

Plans for new Vanau Levu airport:

https://centreforaviation.com/data/profiles/newairports/new-labasavanua-levu-international-airport

3.2.4 INTERNATIONAL CONNECTIVITY (AIRPORTS AND SEA PORTS)

"Enhancing Fiji's status as a vibrant and modern regional and international hub for people and cargo movement"

AIR CONNECTIVITY:

- International connectivity is vital for Fiji to reap the benefits of globalisation and expand our trade and tourism potential.
- Our location is also ideal to be a regional and international air and sea transport hub as well as provide a feeder network to service other hubs.
- Nadi International Airport has upgraded the terminal to international level, pavement rehabilitation and other development works, creating a new image of Fiji's main international gateway. There are now plans to construct a second international terminal and an upgraded domestic terminal
- Upgrade works for the Nausori International Airport terminal and runway will also be undertaken to continually raise standards and facilities
- Fiji Airways has also been undertaking major investments in renewing its fleet through both outright purchases and leasing arrangements. In addition, the government will assist Fiji Airways in exploring and establishing new routes across the globe.



SEA CONNECTIVITY:

- Fiji's seaports provide the major gateway for container and cargo movement and more recently for passenger movements with the growth in cruise tourism.
- Recently, government has partnered with the private sector for the management of Fiji's ports and cargo terminals



- For Fiji to be a regional and international hub, it must improve cargo-volume handling for imports, exports and transhipments. Investments will be made to raise berthing capacity and water depth, improve port efficiency, reduce turnaround time, adopt modern technology.
- A long-term Ports Master Plan with a 7-year implementation plan is currently being developed to determine the current state and scope of international port operations
- Partnerships between government and the private sector will be pursued to support the company in expanding its services in these areas.

Further Information:

Ports Master plan:

https://www.adb.org/projects/49281-001/main

3.2.5 MODERNISING THE BUSINESS REGULATORY ENVIRONMENT

"A sound regulatory environment for inclusive and sustainable private sector development"

- The private sector plays a vital role in development, job creation and innovation.
 Government is continuously working towards improving the enabling environment for the private sector to thrive and expand
- The overall cost of doing business in fiji is reducing. Through reduced tax rates, registration and licensing requirements being streamlined, the new Companies Act has been enacted, business-opening hours have been relaxed, private sector participation in strategic areas is being pursued and supportive infrastructure is being developed.
- In the next 5 years, further improvements will be made to support business activity
- The policy and regulatory framework for investment will be reviewed to entice more investment
- Government has engaged Singapore Cooperation Enterprise to provide technical assistance to improve the ease of doing business.
- Development permission and building approvals are important aspects of the business regulatory framework. In this regard, the Regulation of Building Permits Act 2017 has been passed, providing a fast-track process to enhance the existing building permits approvals process
- Tax administration will be further improved
- The competition policy framework will be enhanced to promote greater self-regulation and compliance and reduce restrictive trade practices.



Companies Act:

https://www.hanifftuitoga.com.fj/single-post/Fiji-Companies-Act-2015-What-it-means#:~:text=The%20aim%20of%20the%20Act,more%20accountable%20for%20their%20conduct.&text=between%20the%20company%20and%20each%20director%20and%20company%20secretary%3B%20and

Singapore cooperation enterprise:

http://www.sce.org.sg/

3.2.6 MICRO, SMALL AND MEDIUM ENTERPRISES DEVELOPMENT

"Promoting entrepreneurial culture through sustainable micro, small and medium enterprises"

- The growth of micro, small and medium enterprises (MSMEs) is essential for job creation, income generation, rural development, poverty alleviation and empowerment of youth and women.
- A MSME council has been established to provide policy direction and leadership to enable and facilitate strategies for the development of MSMEs in the country
- The primary focus will be on coordinating financing, facilitating business training, mentoring, advisory and incubation, and data-collection support.
- Government will also launch the Young Entrepreneurship Scheme (YES), which will
 provide immediate assistance to qualified young and budding entrepreneurs
- A 'Roadside Stalls Project' will be piloted to provide vendors along the highway in the areas outside of municipalities with standardized stalls to sell their produce
- To guide the operations of microfinance service providers, a legal and regulatory framework will be developed.
- A database will be established to register MSMEs to ensure availability of reliable data that will assist in policymaking. More funding and other resources will be channelled towards business incubation, skills training and other support services.



Image 1. The roadside stall pilot project at Vakabalea, Navua.

FURTHER INFO

MSME council

The national MSME Development Council, chaired by the Prime Minister, provides strategic policy direction and leadership for the development of MSMEs in Fiji. Whilst the Central Coordinating Agency (CCA) will be the primary body that implements this framework, working towards the goal of promoting entrepreneurial culture through sustainable MSMEs.

MSME Central Coordinating Agency

The principal purpose of the MSME CCA is to develop, implement, monitor and evaluate MSME development in collaboration with stakeholders. The primary focus of the CCA will be on coordinating financing, facilitating business training, mentoring, advisory and incubation and data-collection support

Some of the schemes and initiatives under coordination by the CCA:

- The micro and small business grant initiative (MSBG)
- Young Entrepreneurship Scheme (YES)
- National Innovation Framework
- Roadside Stalls Project
- National Innovation Framework
- Activities undertaken by the national centre for small and micro enterprise development (NCSMED)
- Livelihood Grant Ministry of Women & Social Welfare
- Youth Grant Ministry of Youth & Sports
- Young Entrepreneurship Grant Ministry of Youth & Sports
- Empowerment Project Ministry of Youth & Sports
- Import Substitution Programme Ministry of Agriculture
- Export Promotion Programme Ministry of Agriculture
- Food Security Programme Ministry of Agriculture

As part of the FNDP, more funding is being channelled towards business incubation, skills training and other support services.

Sources and more information on MSME:

https://www.mcttt.gov.fj/divisions/msme_fiji/)

https://investinfiji.today/wp-content/uploads/2018/12/ToR-MSME-CCA-Programme-Director.pdf

3.2.7 MANUFACTURING AND COMMERCE

"Building sustainable and globally competitive manufacturing and commerce"

- To transform Fiji, the manufacturing sector will be developed further, with more value addition and expansion into new areas of manufacturing
- The elimination of fiscal duty on raw materials, zero duty on plant and machinery, low corporate taxes, tax free regions and other incentives have been provided by Government to support manufacturing and commerce
- Government's focus in the next 5 years is to develop Fiji as a manufacturing hub of the Pacific
 - large educated workforce
 - competitive wage rates
 - attractive business environment provide the enabling environment for the manufacturing sector to thrive
- Investments will be supported for competitive highvalue-added industries with an emphasis on agrobased manufacturing and niche products for export development
- Specialised training and skill development will be provided to meet the skills requirements of the manufacturing sector.
 - Skills will be developed in collaboration with the technical colleges and tertiary institutions.

3.2.18 INFORMATION AND COMMUNICATION TECHNOLOGY

"Universal access to information and competitive telecommunication services delivered on a secure platform"

- Information and communication technology (ICT) has transformed the lives of people by raising productivity and growth, creating more employment, improving connectivity between urban and rural areas, enhancing service delivery, and promoting innovation.
- Fiji has a competitive edge in the region because of its access to the Southern Cross Cable fibre optic network (SCCN).
- 95 percent of the country is connected through wire and wireless network as opposed to satellite.
- Fiji has also developed the region's first national broadband policy. Mobile phone
 penetration and mobile broadband access have increased with the extension of 3G and
 4G network coverage.
- The fibre optic cable project between Viti Levu and Vanua Levu via the Samoa-Fiji submarine cable is currently underway and will address bandwidth capacity constraints and make the internet more accessible to all Fijians. Other planned fibre optic cable projects will be pursued through private sector partnerships.
- Communication infrastructure will be made available to multiple users under reasonable terms and conditions to enhance competition in broadband internet.

- The Telecommunication Authority of Fiji (TAF) will regularly survey areas to be a "Declared Universal Service Area", which is a prerequisite for telecommunications companies to erect network towers in those areas.
- Fiji's strategic location between Asia and the USA provides a time-zone business advantage to access East Asia, the USA, and Europe. With abundant skilled technical labour, a good English-speaking population, low costs of doing business and tax incentives, investment will be attracted for ICT development in back-office operations and call centres.

SDG 9 in Figures:

- \$10.2 million Total official flows for infrastructure, official Dvelopment Assitance (ODA)
 (2018)
- 94% Proportion of population covered by mobile network, 3G. (2018)
- 75% Proportion of population covered by mobile network, LTE/WiMAX (2018)

Statistics sourced from:

https://www.adb.org/countries/fiji/poverty

SDG 2019 Review:

 Fiji has integrated SDG 9 into many aspects of the 5-Year & 20-Year National Development Plan (NDP), in particular infrastructure, telecommunications and financial services.

Environmentally Sustainable Energy Sector

- The strong involvement of Government in the power sector over the years has resulted in approximately 90 percent of Fiji's population having proper access to electricity.
- There has been an increase in the grid extension programme to reach the remaining 10 percent of the population that does not have access to electricity.
- Access to electricity increased from 69 percent in 2004 to 98 percent in 2016.
- As highlighted in the Fiji's NDP, over 60 percent of the electricity generated is from renewable energy sources including hydro, biomass, wind and solar energy from which 50 MW of renewable energy generation capacity has been added in the last 10 years.

Efficient and Sustainable Transport Network

- Fiji's road network infrastructure is estimated to be worth nearly FJ\$11 billion, making it Fiji's most valuable asset.
- Fiji has already embarked on modernising the infrastructure with substantial funding to improve roads, bridges, jetties, streetlights and footpaths over recent years.

- For example between 2013 and 2018, the government has allocated a total of more than FJ\$3 billion on restoring, upgrading and building new roads, bridges and jetties through the Rural Roads Programme
- Shipping Services Subsidy (SSS) provides monthly subsidy to shipping service operators to encourage cost-effective shipping services to outer islands that are considered to be in uneconomical routes.
- due to the remoteness of some outer islands and the limited access to medical services,
 Government has also purchased a medical vessel to provide primary and secondary
 medical services and respond to medical emergencies in these areas

Universal Access to Information and Competitive Telecommunication Services

- The Telecommunication sector has grown significantly since 2008
- Fiji has relatively robust telecommunications infrastructure
- Fiji's local mobile phone companies' commitment to upgrading their networks to provide 4G technology.
- In 2013, Fiji pledged to work towards 100% mobile network coverage throughout the county.
- In 2016, 96% of the population in Fiji had access to at least a 3G network
- "Free WiFi Zone" initiative
- One Laptop per Child initiative
- In 2016, the government implemented the "Fijian Made Buy Fijian" initiative to promote locally manufactured products, both within Fiji and internationally.
- In November 2017, the Fijian Government partnered with the Singapore Government, through the Singapore Cooperation Enterprise (SCE)
- digitalFIJI is the Fijian Government's digital transformation programme
 - The objective of digitalFIJI is not only to implement digital solutions for efficient Government service delivery but also to learn from the Singapore experience in rapidly adapting and leveraging new technologies.
 - The vision for digitalFIJI is to provide 24 x 7, anywhere and anytime access to priority Government services for citizens.
- MSMEs play a vital role in economic development in Fiji. MSMEs constitute approximately 97% of established businesses in Fiji, contribute to approximately 60% of employment, and account for around 12%-13% of Fiji's GDP (Reserve Bank of Fiji, 2018).
- Despite considerable progress considerable progress in extending infrastructure and services into rural communities, access to infrastructure in rural areas remains a national challenge
 - The 2017 census revealed that 44.1% of the population reside in rural areas which is a decrease of 5.2 percentage points from the 2007 census