FINANCE FOR JOBS
استثمار وفرص عمل

State of Palestine
Ministry of Finance

FINANCE FOR JOBS

INVESTMENT CO-FINANCING FACILITY

SOCIO-COST BENEFIT ANALYSIS

Fiber Optics (FTTH/B) Project – West Bank

By MADA Al-Arab Company

MARCH 20, 2022

F4J is implemented by DAI on behalf of

The Ministry of Finance

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Table of Content

Acronyms

ADSL	Asymmetric Digital Subscriber Line
CAGR	Compound Annual Growth Rate
CGE	Computable General Equilibrium model
Co.	Company
DCE	Discrete Choice Experiment
DD	Due Diligence
E.O.	Executive Order
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization
ERR	Economic Internal Rate of Return
F4J	Finance for Jobs
FTTH	The Fiber to The Home
FTTH/B	The Fiber to The Home or Business
ICF	Investment Co-Financing Facility
IPTV	Internet protocol television
IRR	Internal Rate of Return
L2TP	Layer 2 Tunneling Protocol
MADA	Mada Al-Arab For General Services Company
MTIT	Ministry of Telecommunication and Information and Technology
MoF	Ministry of Finance
MoNE	Ministry of National Economy
NPV	Net Present Value
OFAC	Office of Foreign Assets Control
PALTEL	Palestine Telecommunications Company

PCBS	Palestinian Center Bureau of Statistics
PIA	Project Implementation Agency
PPPoE	Point-to-Point Protocol over Ethernet
SAM	System for Award Management
SCBA	Social and Cost-Benefit Analysis
SDN	Specially Designated Nationals
SRR	Social Rate of Return
U.S.	United States Government
UN	United Nations
USD	United States Dollar
VAT	Value-Added Tax
WB	World Bank
WTP	Willingness to Pay

Executive Summary

This report presents Mada Al-Arab For General Services Company (MADA) investment proposal to support the construction of 700 km of Fiber Optic Infrastructure across the cities of Ramallah and Al-Bireh, and Bethlehem to ease access to the internet, increase quality (stability, security, and speed) and affordability of internet services in the West Bank. The infrastructure will reach out to more than 10,000 buildings and connect and estimate of 100,000 users via Point-to-Point Protocol over Ethernet (PPPoE) model, starting with MADA current subscribers. The overall investment required for this phase is USD 8,000,000.

The F4J team conducted thorough analysis and technical due diligence over the past few months with support from Sharp & Beyond Legal and Investment Consulting who validated the project assumptions on which the financial analysis has been conducted. It was concluded that the proposed investment meets the requirements for public financing support under the ICF component of F4J.

The Fiber to The Home or Business (FTTH/B) connectivity is a development that is long overdue in Palestinian society. However, the existence of both institutional and market failures hinders investors

to proceed with a comprehensive and holistic fiber-optic infrastructure project. Key issues preventing MADA to proceed with the investment, as a whole, include but not limited to:

- Institutional failures related to the regulatory framework promote a de facto monopoly: the regulator liberalized the market of Internet Service providers (ISPs) but did not address any regulation in the transmission backbone owned by Palestine Telecommunications Company (PALTEL), which is needed by Internet Service providers (ISPs) to interconnect the different geographical areas covered and enrich their services portfolio, which would in turn benefit subscribers. The regulator should have requested PALTEL to sell capacity of its transmission backbone to those ISPs with clear instructions on the transmission fees for leasing such capacity, or it should have licensed another operator for the wholesale transmission business.
  The regulator also failed to (1) specify the services expected from the licensees, time plan, geographic coverage, technology, and many other items, and (2) verify the financial capacity of licensees to provide the services. This weakness in regulations not only kept the monopoly of PALTEL in the market but has created a situation whereby a licensee like MADA is unable to offer broadband access services without immense investment in the whole infrastructure chain including transmission; which is unrealistic and not a good practice neither.
- Unauthorized competition by Israeli operators. Based on the Oslo agreement, Israeli Telecommunication Operators are forbidden to operate within the Palestinian Authority areas of influence (West Bank and Gaza).The market share of the Israeli operators has been diminishing but could rise again at once as they are able to provide 4G and 5G services and data packages that cannot be matched by Palestinian operators. The presence of aggressive data packages from Israeli operators may also prove to be a competitive challenge.
- Israeli restrictions to import civil and ICT material across borders; difficulties to obtain permits to operate in Area C; restriction of movement of goods and people within Area C impedes deployment and maintenance of infrastructure; and the requirement by Israel that Palestinian operators go through an Israeli-registered company to access international links (infrastructure deployment and maintenance).

With around USD 1,500,000 financing gap in Phase I, the crux of proving the viability of FTTH/B being well worth the risk if rolling out in the Ramallah and Bethlehem zones results in take-up of over 60% of the conversation rate from Asymmetric Digital Subscriber Line (ADSL) to Fiber Optic connectivity reflecting the MENA-17 average[1]. In addition, infrastructure investments require a substantial timeline to realize any return on investment. This risk is quite significant to investors, as they do not have the national reach nor the market presence that PATEL has. This is evident when an internal rate of return (IRR) of 6% is observed as opposite to benchmarks which indicate IRRs over 12%[2].

The total project investment cost is estimated at around USD 8,000,000; of which USD 5,000,000 will be secured by debt from the Arab Bank. MADA will inject around USD 1,500,000 in the form of equity. The remaining required investment of USD 1,500,000 is proposed to be granted by the PIA to

[1] FTTH-Council-MENA-Panorama-2019

[2] https://openknowledge.worldbank.org/bitstream/handle/10986/31072/132845-7-12-2018-17-20-11-InnovativeBusinessModels.pdf

bridge the financing gap and cover the cost of utilization of JEDCO infrastructure. This will increase the IRR to match the hurdle rate of 10% and encourage MADA to proceed with the investment.

The project investment is expected to deliver positive socio-economic returns with an estimated Social Rate of Return (SRR) 27%. The estimated SRR is significantly above the IRR without public finance support (6%) and the IRR with the F4J-ICF grant support (10%). The project is expected to create approximately 370 full-time direct (261) and indirect (109) equivalent jobs, of which 18% are expected to be jobs for women. Such a percentage of females is in line with the current workforce structure in the Palestinian. However, MADA would work on a gender outreach plan during the implementation of the project to increase the contribution to 30%.

Furthermore, the project will result in (i) an enhanced internet services with higher speeds in download and upload (100 to 1,000+ Mb); (ii) more reliable networks with higher reach, safer, and superior quality; (iii) an improved customer experience using internet and add-on services (internet protocol television (IPTV), e-governance, digital payment, online gaming, education, start-ups, applications, online shopping, business, etc.); (iv) a monopoly-free market, improved fair competition and information symmetry and fair internet access; (v) creating a competitive advantage and encouraging other investors to join in and increase the interest to invest in the sector at a larger scale; (vi) converting to a more cost-effective model for the end-user; (vii) opening the doors for advancements in new industries, services, and applications; (viii) solving the dilemma of currently low upload speeds and internet cuts; (ix) providing internet services at lower prices and within internet bundles that are separated from the unused landline phone subscription; and, (x) allowing the connectivity of smart meters for electricity services (smart grid), and the advancement of smart cities in general.

The DD analysis herein suggests that MADA is well-positioned to undertake this project. Its financial health is generally good, and it has the institutional capacity to manage the project. The project is thus evaluated to be financially viable with the proposed support provided by F4J's Investment Co-Financing Facility (ICF) grant component.

MADA AL ARAB CO.'S FIBER OPTIC PROJECT

Mada Al-Arab For General Services Company (MADA) is a private entity licensed by the Ministry of National Economy (MoNE) on January 6, 2009, and since 2010, MADA has been providing internet services through ADSL lines and microwave links.

In light of the increasing demand for better, safer, and affordable internet connectivity to sustain economic growth in Palestine, MADA intends to develop 700 km of Fiber Optic Infrastructure, as the first phase, across the cities of Ramallah and Al-Bireh, and Bethlehem to ease internet access , improve quality (stability, security, and speed) and affordability of internet services. The estimated investment for this project is around USD 8,000,000.

*Figure SEQ Figure * ARABIC1 Ramallah & Al-Bireh Fiber Network*

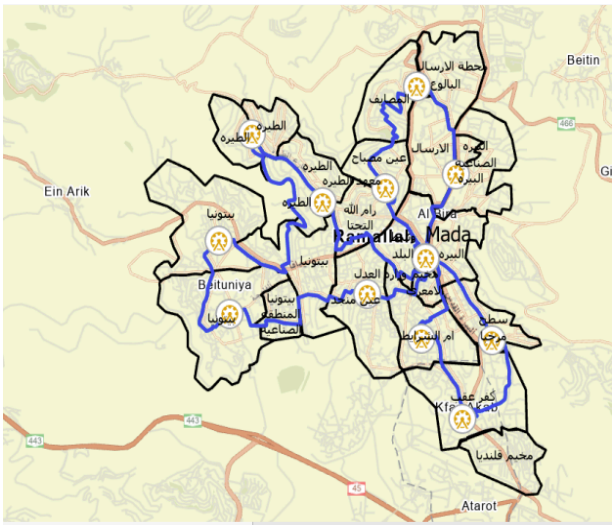


*Figure SEQ Figure * ARABIC2 Bethlehem Fiber Network*

The Fiber To The Home or Business (FTTH/B) is an access solution designed to deliver communication signals over optical Fiber, directly connecting the operator's switching equipment to homes and buildings. The infrastructure will reach more than 10,000 buildings, and MADA estimates to connect 100,000 users via Point-to-Point Protocol over Ethernet (PPPoE) model, starting with current subscribers. The core of this model is simply a routing of the end consumer PPPoE connection through Layer 2 Tunneling Protocol (L2TP) tunnel to the destined ISP, where the discrimination of the suffix DomainName will pick the proper Internet Service Provider (ISP) to serve the end consumer, and hence (a) the Gigabit Ethernet Passive Optical Network (GPON) is managed by MADA; and, (b) end consumer provisioning of the internet will be aggregated through any ISP the customer will choose.

Figure 3 Business Model: PPPoE

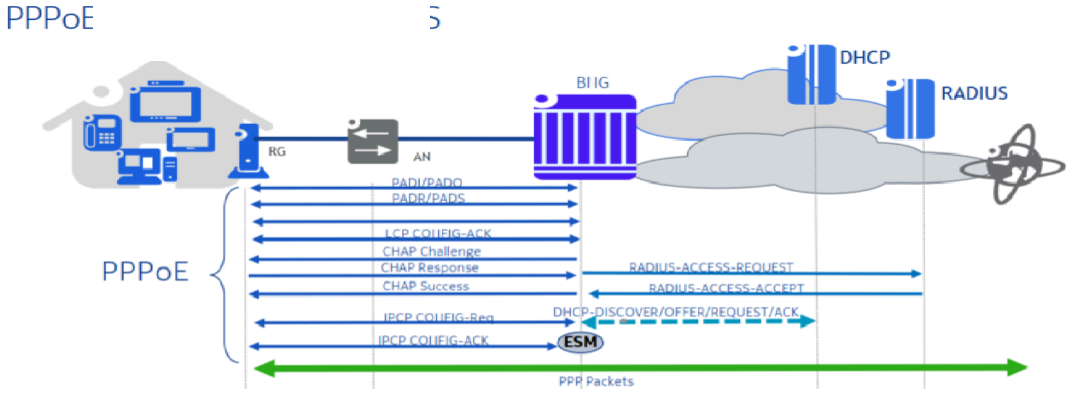


Figure 4 L2TP for PPPoE Model

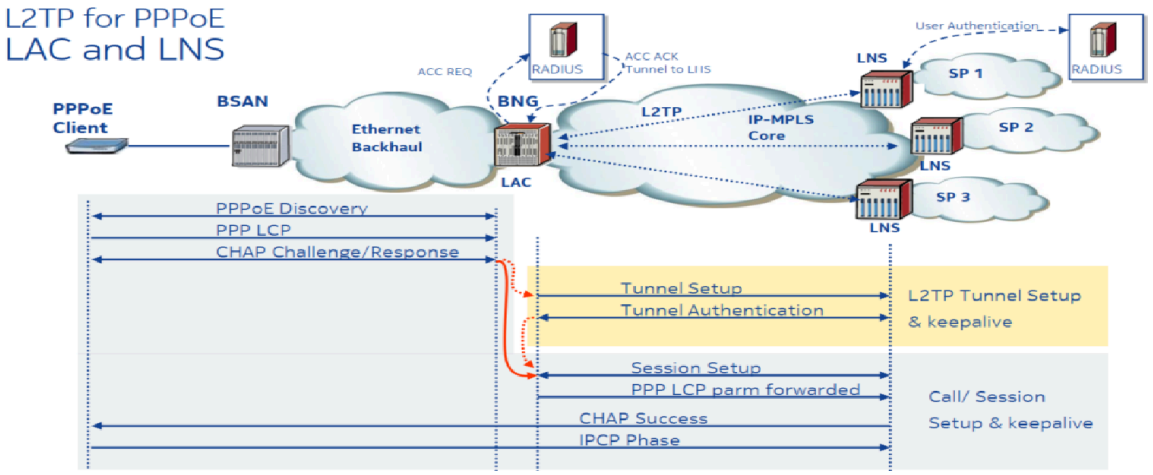
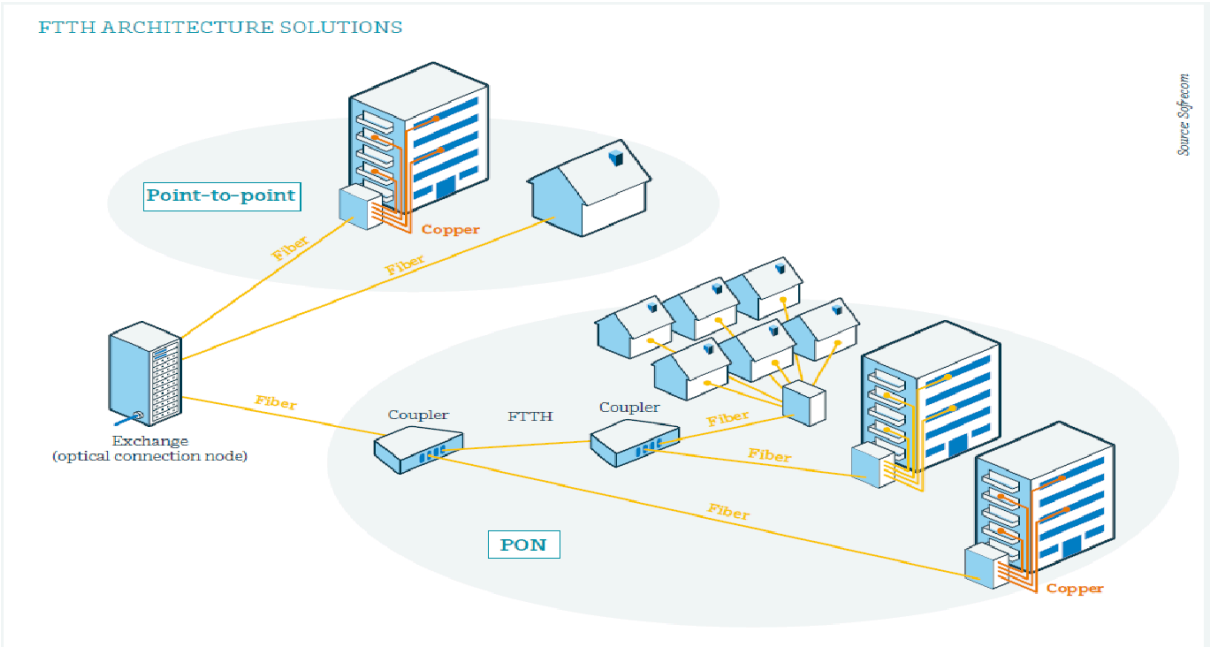


Figure 5 FTTH Infrastructure Network Solutions



The master plan of MADA consists of updating the telecommunication infrastructure to connect cities and villages across the West Bank in one strong network. Such a project will require an estimated investment of USD 30,000,000. However, MADA will only execute it if the 700Km of Fiber Optics investment proves to be sustainable; thus, this project is considered phase 1. The project also comes as a different approach from other Internet Service providers (ISPs) who tackle the issues as density hub-driven networks rather than infrastructure investment. In other words, the existing projects do not connect cities and villages but stand-alone neighborhoods only, through the monopolistic infrastructure owned by the PALTEL group. Opposite to that, MADA's approach provides economy of scale and offer potential for growth, resilience, and livelihood for new businesses/startups and entrepreneurs targeting the whole general public. To achieve this, MADA is forced to build up a complete network infrastructure from scratch.

The rationale for Public Finance

The Fiber to The Home or Business (FTTH/B) connectivity is a development necessity that is long overdue in the Palestinian society. It represents the potential for a fundamental shift in demand for data and how local citizens, organizations, and companies can use data to generate economic activities and subsequent profits that would yield greater and more sustainable economic growth impacting industry, private and public sectors.

MADA's proposed investment in FTTH/B is aligned with the National Strategy of the Palestinian Ministry of Telecommunication and Information and Technology (MTIT) and their efforts to provide FTTH/B to subscribers throughout Palestine, taking into consideration the growing level of demand, the heavy need for internet and data through smartphones, laptops, and other devices. In addition to the Internet of Things (IoT) for Smart Televisions, Satellites, home appliances, and the increasing reliance on remote work and online meetings requesting high and sustainable up/download speeds. Therefore, it is the time for an enhanced infrastructure that could serve the demand of various layers of Palestinian society. Nevertheless, the institutional and market failures in the Palestinian sphere hinders investors to proceed with a holistic fiber-optic infrastructure project approach.

The scheme of Broadband-Bitstream Access (BSA), established by the MTIT in 2010, was considered as an interim market reform until more restructuring steps of the market are taken at a later stage, something which did not happen until today, creating an institutional failure that the private sector bear until today. Under the BSA scheme, Palestine Telecommunications Company (PALTEL) – the owner of the existing telecommunication infrastructure – provides broadband access (ADSL) service to ISPs (licensees), who in turn provide internet service to their subscribers. This model requires subscribers to pay two fees to two different parties: (1) a broadband access fee, paid directly to PALTEL, and (2) an internet service fee, paid directly to the licensee. This creates unfair and inherent advantage for PALTEL in offering ADSL services. As such, the negative consequences owing to this scheme on the market stakeholders became evident.

- For the ISP (licensee), this scheme does not grant control to the licensee on the service provision or its quality, which remains in PALTEL's full control as the owner and operator of the infrastructure, causing strict limitations in developing the service quality and competitive commercial strategy.
- As for the subscribers, this created inconvenience by forcing them to double-pay exaggerated fees for one service, which creates complications in understanding the service fees and payment. It also does not offer room to lower the internet service cost on the long run as the access component remains within PALTEL monopoly.

  Parallel to this, the subscribers are suffering from inconvenience in customer support services, as their communication is restricted with the IPS licensee, who in turn communicates with PALTEL to resolve any technical issues. This is time consuming and causing delays (weeks in some cases) and inconvenience for the subscriber before getting a technical problem resolved.

On January 1, 2019, the MTIT issued another license (including PALTEL and MADA among others) to rollout fiber optics infrastructure and provide broadband access services, which would give higher

speed and reliability for the broadband access service. Despite being a step in the right direction, the regulatory decision made by MTIT regarding those licenses was with shortfalls as it did not address several regulatory aspects within the telecommunications chain components, which is still monopolized by PALTEL. For example, the regulator did not address any regulation in the transmission backbone owned by PALTEL, that is needed by ISPs to interconnect the different geographical areas covered and enrich their services portfolio, which would in turn benefit subscribers. The regulator should have forced PALTEL to sell capacity of its transmission backbone to those ISPs with clear instructions on the transmission fees for leasing such capacity, or it should have licensed another operator for the wholesale transmission business.

The regulator also failed to (1) specify the services expected from the licensees, time plan, geographic coverage, technology, and many other items, and (2) verify the financial capacity of licensees to provide the services. This limitation in regulations not only reserved the monopoly of PALTEL in the market but has also created a situation whereby a licensee, like MADA, is unable to offer broadband access services without investment in the whole infrastructure chain including transmission, which is not realistic, and requires immense capital investment. This reality has pushed MADA investors to consider other solutions of fiber optics rollout; one of which was the utilization of the electricity grid owned by Jerusalem District Electricity Company (JDECO). Though this regulatory step resolves the access infrastructure issue, it will keep the need for a transmission backbone to interconnect different geographical areas, without which the services offered would be limited to internet access only.

Other key external challenges MADA faces include:

- Unauthorized competition by Israeli operators. Based on the Oslo agreement, Israeli Telecommunication Operators are forbidden to operate within the Palestinian Authority areas of influence (West Bank and Gaza). Their market share has diminished but could rise again as they can provide 4G and 5G services and data packages that cannot be matched by Palestinian operators. The presence of aggressive data packages from Israeli operators may also become a competitive challenge.
- Furthermore, other challenges include Israeli restrictions to import civil and ICT material across borders; difficulties to obtain permits to operate in Area C; restriction of movement of goods and people within Area C that impedes the deployment and maintenance of infrastructure; and the requirement by Israel that Palestinian operators go through an Israeli-registered company to access international links (infrastructure deployment and maintenance).

With an around USD 1,500,000 financing gap in Phase I, the crux of proving the viability of FTTH/B being well worth the risk if rolling out in the Ramallah and Bethlehem zones results in take-up of over 60% of The conversation rate from Asymmetric Digital Subscriber Line (ADSL) to Fiber Optic connectivity, reflecting the MENA-17 average[3]. In addition, infrastructure investments require a substantial time to realize return on investment, and this risk is quite significant to MADA or any other ISP, as none of them have the national reach nor the market presence that PALTEL has. This is

[3] FTTH-Council-MENA-Panorama-2019

evident when it is observed of an internal rate of return (IRR) of 6% as opposed to benchmarks of more than 12% IRRs [4].

The total project investment cost is estimated at around USD 8,000,000; of which USD 5,000,000 will be secured by debt from the Arab Bank. MADA will inject around USD 1,500,000 in the form of equity. The remaining required investment of USD 1,500,000 (19% of the total investment is proposed to be granted by the PIA as a bridge financing grant to cover the cost of the utilization of JEDCO infrastructure against the effect of an institutional failure. This will increase the IRR to match the hurdle rate of 10% and encourage MADA to proceed with the investment.

The project investment is expected to deliver positive socio-economic returns with an estimated Social Rate of Return (SRR) of 27%. The expected SRR is significantly above the IRR (6%) without support and the IRR with the F4J-ICF grant support (10%). The project is expected to create approximately 370 full-time equivalent jobs (direct 261 and indirect 109); of which 18% is expected to be jobs for females. Such a percentage of females is in line with the current workforce structure in the Palestinian. MADA would work on outreach plan to increase the contribution to 30%.

[4] https://openknowledge.worldbank.org/bitstream/handle/10986/31072/132845-7-12-2018-17-20-11-InnovativeBusinessModels.pdf

Table 1 Mada Al Arab's FTTH Project - Jobs

	Young Males	Young Females	Adult Males	Adult Females	Total
Skilled	94	22	133	28	**277**
Non-Skilled	32	8	44	9	**93**
Total	**126**	**30**	**177**	**37**	**370**

Table 2 Construction & Installation Jobs

	Young Males	Young Females	Adult Males	Adult Females	Total
Skilled	24	6	34	7	**71**
Non-Skilled	24	6	34	8	**72**
Total	**48**	**12**	**68**	**15**	**143**

Table 3 Operations & Commercialization Jobs

	Young Males	Young Females	Adult Males	Adult Females	Total
Skilled	41	9	56	12	**118**
Non-Skilled	-	-	-	-	**-**
Total	**41**	**9**	**56**	**12**	**118**

Table 4 Indirect Labor

	Young Males	Young Females	Adult Males	Adult Females	Total
Skilled	29	7	43	9	**88**
Non-Skilled	8	2	10	1	**21**
Total	**37**	**9**	**53**	**10**	**109**

The F4J team concludes that this project addresses clear market and institutional failures and provides vital opportunities for further stability and growth of the Palestinian Telecommunication sector; it results in: (i) an enhanced internet services with higher speeds in download and upload (100 to 1,000+ Mb); (ii) more reliable networks with higher reach, safer, and superior quality; (iii) an improved customer experience using internet and add-on services (internet protocol television (IPTV), e-governance, digital payment, online gaming, education, start-ups, applications, online shopping, business, etc.); (iv) a monopoly-free market, improved fair competition and information symmetry and fair internet access; (v) creating a competitive advantage and encouraging other investors to join in and increase the interest to invest in the sector at a larger scale; (vi) converting to a more cost-effective model for the end-user; (vii) opening the doors for advancements in new industries, services, and applications; (viii) solving the dilemma of currently low upload speeds and internet cuts; (ix) providing internet services at lower prices and within internet bundles that are separated from the unused landline phone subscription; and, (x) allowing the connectivity of smart meters for electricity services (smart grid), and the advancement of smart cities in general.

Project Financial Requirements

The total project investment cost is estimated at around USD 8,000,000. The financing structure of the proposed project is comprised of a sponsor equity of around USD 1,500,000, and debt finance from Arab Bank of around USD 5,000,000. F4J-ICF proposed grant support will complement the investment cost in the amount of USD 1,500,000 to cover the cost of the use of the infrastructure of JEDCO for the first year of operations, only; leveraging private capital mobilization at a ratio of 1:5 and at a cost per job of approximately USD 4,000.

It is worth noting that JEDCO will make available its infrastructure to MADA for an annual payment of USD 1,500,000 for 15 years.

Table 5 Financial Structure

Investment Cost					
			Equity		
CAPEX	7,500,000	95%	MADA	1,783,655	23 %
OPEX	408,904	5%	F4J-ICF	1,500,000	19 %
			Subtotal	**3,283,655**	**42 %**
			Debt		
			Arab Bank	4,625,249	58 %
			subtotal	**4,625,249**	**58 %**
Total	**7,908,904**	**100%**	**Total**	**7,908,904**	**100 %**

Use of Grant and Grant Disbursement

The investment of approximately USD 8,000,000 is expected to be disbursed as follows:

Table 6 Project Disbursement Plan

	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**Total**
Working Capital	36,085	150,946	107,311	52,897	35,279	26,387	**408,904**
CAPEX	3,608,548	2,748,874	524,482	279,781	191,988	146,326	**7,500,000**
	3,644,634	**2,899,820**	**631,793**	**332,678**	**227,266**	**172,713**	**7,908,904**

The F4J-ICF grant of USD 1,500,000 will cover the cost in full of the JEDCO grid for one year only to allow MADA proceed with the investment in Fiber Optic infrastructure.

The grant will cover the cost of the infrastructure because of (a) the cash flow analysis shows that the cost of JEDCO infrastructure imposes a liquidity burn during the first years of operations that hinder faster implementation. Thus, it will be better to offset it to allow further and faster expansion; and (b) the needed compliance with existing infrastructure will force MADA to recur to direct contracting/sole source purchase. The cost of such procedural compliance is too high for the overall health of the project implementation arrangements and the anticipated benefits of moving first in the market.

Table 7 Grant Contribution

	Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**	**Total**
JEDCO	**375,000**	**375,000**	**375,000**	**375,000**	**1,500,000**

Procurement Method

MADA will adopt the following procurement method for contracting the provider of the Grid Infrastructure.

Table 8 Procurement Plan

Activity	Estimate Cost[5] (US$)	Type of Procurement[6]	Procurement Method	Review by PIA	Review by World Bank	Contract Signing Date (Planned)	Contract Completion Date (Planned)
JEDCO Grid Rent	1,500,000	NCS	Sole Source	Post	Post	14/4/2021	30/3/2036

MADA has signed an agreement with JEDCO on 14/4/2021 and an amendment of it on 10/7/21 to utilize their infrastructure in Ramallah and Al-Bireh, and Bethlehem to deploy their FTTH/B network. Such contract is valid until 30/3/2036. MADA will pay an annual fee of USD 1,500,000.

JEDCO is the sole owner of the standing infrastructure across these cities. This comes as the sole solution to overcome the institutional failures above explained. Before this, MADA had considered (1) investing in their infrastructure but was rejected as it was found not feasible due to (a) the very high cost in assets that negatively impacts the project returns and payback, (b) the long period for the network to get ready due to permits and licenses requirements in addition to the civil works, and (c) the environmental issues related to the large-scale construction works; and (2) use the infrastructure that is fully owned by PALTEL. However, MADA could not reach an agreement with them since PALTEL refused to lease its infrastructure

F4J will review such contract with JEDCO, retroactively, and request amendments, if needed, to ensure adherence to the required regulations of PIA and World Bank Group, before granting PIA's non-objection. This will also include the validation of the price fairness of such a contract.

Project Socio-Cost Benefit Analysis

The socio-economic analysis was conducted based on the following assumptions:

1. The SCBA model was built based on the financial model prepared by MADA Al Arab. This financial model was reviewed, revised and approved by the F4J team.
2. Computable General Equilibrium (CGE) results were used to derive the job creation impact of the project on indirect labor. This model simulates potential labor market impacts of investments across economic sectors.
3. Discrete Choice Experiment (DCE) results were used to determine the value of social externalities.
4. WB Group benchmarks were used when there was no available or established data.

[5] Include Applicable taxes

[6] Include "G" for goods, "W" for works, "NCS" for non-consulting services, and "CS" for consulting services.t

5. SCBA outcomes correspond to the overall life of the project, discounted to their present value and at opportunity cost.

The examination of the economic and social viability of the project from the national and societal perspective, including savings and revenues for the government and society and the impact of labor externalities and their associated social value, suggest that the project is socio-economically viable and that the benefits of the expansion of agricultural crops far exceeds the costs. The socio-economic rate of return (SRR) of the project is 27%, which is far greater than the IRR (6%).

The table below illustrates key takeaways of the social and cost benefit analysis (SCBA) exercise.

Table 9 Takeaways: Socio Cost Benefit Analysis

Socio Cost Benefit Analysis Summary			
Jobs	370	F4J Grant in USD	$1,500,000
Direct Jobs	261	IRR w/F4J-ICF	10%
Indirect Jobs	109	Present value of Labor Externalities	$858,018
Investment in USD	$7,908,904	Present value of Social Externalities	$210,641
IRR w/o F4J	6%	Present Value of Externalities	$1,068,659
Economic Net Present Value	$ 690,174	Economic Cost Benefit-Ratio	1.4
Socio-Economic Net Present value	$ 900,814	Socio-economic Cost Benefit-Ratio	1.5
Economic Rate of Return	22%	Socio-Economic Rate of Return	27%

Project Socio-Economic Benefit

The project socio-economic benefits derived from the project amount to approximately USD 2,800,000.

Job-Linked Externalities

The value of labor externalities amounts to approximately USD 860,000.

It is estimated that 370 jobs will be created, of which 261 are direct jobs and 109 are indirect jobs as follows:

Table 10 Jobs: Direct & Indirect

Direct Jobs			
Construction & Installation Jobs	143	Q3-Q4 2022	Projections from planner indicate that the plan is to build a fiber optic cable of around 700km in around 100 days. Every network building team consists of 4 technicians laying 0.8km a day. So, 7km of fiber shall be achieved every day, 14 teams are needed. Connecting 20-24 buildings a day.
Operation & Commercialization Jobs	118	Q1-Q4 2023	**Jobs** / **#**: Network setup technician / 31

Direct Jobs				
			Buildings setup technician	18
			Network engineer	3
			System engineer	2
			IT support	3
			Sales	3
			Field sales agent	22
			Field support	7
			Support center	14
			Customer service center	9
			HR and admin	2
			Procurement & warehousing	2
			Marketing	2
				118
Indirect Jobs				
Construction & Installation	106	Q3 2021	According to the CGE approach that for an investment of around USD 7,500,000 in the construction of 700 Km of Fiber Optic.	
Operation & Commercialization	3	Q4 2022	According to the CGE approach that for an investment of around USD 408,000 in Science and technology.	
	370			

Job-Social Linked Externalities

The average willingness is USD 0.25 for each dollar paid to labor externalities. Thus, the social externalities amount to approximately USD 211,000.

Table 11 Willingness to Pay (WTP)

	USD/Year/Job	# Jobs
Young+Female+Skilled	0.56	22
Young+Female+non-skilled	(0.03)	8
Young+Male+Skilled	0.29	93
Young+Male+non-skilled	(0.29)	32
Adult+Female+Skilled	0.50	29
Adult+Female+non-skilled	(0.08)	10
Adult+Male+Skilled	0.24	131
Adult+Male+non-skilled	0.35	45
Total Jobs		**369**
WTP		**0.25**

Tax Revenue Collection

Government tax revenues are estimated at USD 1,825,701, which include labor income tax (excluding agricultural jobs), and upstream and downstream tax collection. The calculation was done per the WB benchmark of 1.4.

Returns to Capital

Considering that the cost of debt is about 4 %, earnings before interest, taxes, depreciation and amortization (EBITDA) will be reduced by about USD 300,000. Therefore, the estimated economic benefit derived from returns to capital is about USD 82,000.

Project Economic Cost

The project economic cost derived from the project amounts to around USD 2,000,000.

Opportunity Cost of the Investment

A set of opportunity cost indicators was computed in the SCBA model in accordance with the WB guidelines, namely deadweight, displacement and counterfactual. The opportunity cost of the intrinsic value of the investment is about USD 1,700,000.

Tax Collection

The expenses from tax is estimated at around USD 146,000.

Project Socio-Economic Returns

The socio-economic evaluation by project component indicators suggests that the project will deliver positive socio-economic returns with an SRR of 27%, which is above of both the equity IRR (6 %) and equity IRR with the F4J-ICF Support (10%).

Table 12 Project Economic Returns

Economic Rate of Return (ERR)	22%
Economic Net Present Value (ENPV)	USD 690,174
Economic-Cost Benefit Ratio	1.4

Table 13 Project Socio Economic Return

Socio-Economic Rate of Return (SRR)	27%
Socio Economic Net Present Value (SNPV)	USD 900,814
Socio-Economic Cost Benefit Ratio	1.5

ANNEX 1: MADA AL-ARAB'S PROCUREMENT AND FINANCIAL READINESS

The F4J ICF team has conducted an assessment on MADA Al-Arab Company's procurement system, accounting, and financial controls, as well as their governance practices. This exercise aimed to determine their readiness to efficiently manage the project in terms of the robustness of their procurement processes, the transparency and accountability measures of their financial systems and the soundness of their management practices. This section provides an overview of key findings of the assessment.

Procurement System

The procurement assessment focused on process management adequacy, segregation of duties within the procurement process, and the monitoring and reviewing acts. From this assessment, it can be concluded that MADA is following a set of basic procurement procedures derived from common practices, and a written and approved (by MADA's BoD) procurement manual. General findings include but not limited to:

- The company has listed several qualified suppliers and manufacturers based on their previous experience for key technical items.
- Procurement in MADA Company is divided into two categories: Local and International. International Procurement includes purchases of network equipment, Local Procurement includes Fiber Cables, Electrical Supplier, Splitter, Joint and General Equipment.
- The company has tendering and awarding procedures and policies for local purchase and direct contracting from international supplier because it is Single Source like Nokia-Siemens Co.
- procurement cycle begins when the items fall below the reorder point or there is a need purchase a new item to cover network development issues. The decision to procure a new materials/equipment is done in coordination between Chief Technical Officer, Procurement Officer, CFO and the Executive Directors.
- All Purchase requisitions includes items required, Description of Goods/Services, Quantity, Estimated Cost, the required Technical Specification and the required Delivery Time.
- Purchase Requisition is reviewed and approved by Procurement Officer then send it for CFO for approval.
- CFO review Purchase requisition ensure that there is adequate fund to purchase the required equipment and approve purchase requisition.
- If the amount is greater than 7000 NIS MADA obtain at least 3 official quotations. a transparent process is fostered and subject to the institute's internal standards and procedures.
- MADA has a written procurement manual which doesn't include procedures for obtaining quotation whether by phone, email, sealed envelopes or newspaper. As the manual only

includes procurement threshold and procurement method without mentioning how quotations will be obtained. The majority of quotations obtained by email.

- Bidding process is conducted through an open or invite-only call for tenders. Additionally, the call may apply to bidders at the national, regional, or international levels, depending on whether a specific area would lead to greater achievement of results, or if a specific area is necessary due to the nature of the project. Any exception is justified, documented in writing, and approved by the management.
- A purchase Order is sent to supplier.
- Upon receipt of the required materials/equipment the requester in coordination with warehouse officer check the materials/equipment to ensure it meet the specification or not then warehouse manager sign Goods Received Note (GRN).
- Inventory is managed efficiently. Inventory records, inventory materials and inventory disposals are checked every six-months by the financial officer and technical officer who report to the financial manager.
- Current practice complies with the standard practice of segregation of duties.
- There is a written procurement manual which is not clearly clarify the best commercial procurement practice.

Table 14 Procurement Risk Matrix

Risk Description	Description of mitigation (areas of improvement)	Risk Owner
Procurement system is not in line with the best commercial practices	- The PIA has developed a Procurement Policies and Procedures Manual based on Best Commercial Practices. MADA will tailor it to their needs and will adopt it in their daily operations. Such document will be shared with the World Bank for review and clearance.	MADA
Poor & disorganized vendor's management	- Having predefined lists of vendors saved within the company's database for frequent orders. - Automating the vendor management mechanisms with proper documentation.	MADA
Delays in detecting procurement misleads that may occur due to: - Human errors, and/or - Fraud and corruption	- Implementing effective mechanisms of segregating duties throughout the process. - Create a new rule of internal auditing within the company to conduct continuous audit over the compliance with the approved manual.	MADA
Delays in Delivery of the required equipment	- MADA have prepared a long-Term procurement plan in order to ensure that delivery of equipment and	MADA

	material will be on time and will not cause any delay in FTTH project's implementation plan.	

MADA's existing procurement system is good, but in order to comply with principles of the ICF grant program, MADA needs to enhance its procurement manual to cover procedures for obtaining quotation, managing contracts (Service contract, Consultancy contract, etc.), determining pre-qualification criteria for short listing supplier, clear guidance for technical evaluation, logistic management and inventory management. The Procurement manual of PIA should be tailored to meet the needs of MADA company in order to ensure that MADA follow best commercial procurement practices and procedures for domestic and international purchases acceptable to the World Bank.

Financial System

Key findings of the accounting management system include:

- MADA has an organizational structure designed to ensure accountability, fairness, and transparency. Finance department structure comprises a CFO, a Finance Manager, a Finance Officer, and 2 Accountants.
- MADA uses BISAN Accounting software. BISAN Accounting software will ensure proper recording of financial transactions, Producing Financial Reports and Managing Sources of funds.
- MADA has 5 active BISAN's users. clear levels of authorities are granted for the financial department's staff; as there are 2 collection accountants, a finance officer who handles day to day transactions and prepares bank reconciliation, and a finance manager authorized to cancel posted journals/receipts/invoices, closing financial years, and generate the financial reports.
- All invoices, receipts, cheques, or other financial substance documents are recorded in BISAN Accounting software and archived in the Finance Department.
- MADA has recently developed financial manual in June 2021 which is not yet approved by Board of Directors.
- MADA prepares the budget on an annual basis and reviews it semi-annually to assess any major deviation and take corrective actions. The corrective actions are taken after variation occurrence. As the budget is revised on semi-annual basis. A recommendation has been given to MADA to review budget on quarterly basis in order to properly track budget and take corrective actions quickly.
- The expenditure cycle is prepared efficiently, the authorization and required approvals are adopted efficiently.
- Payroll calculations are conducted and prepared by the HR Officer, reviewed by the Finance Manager, and approved by the CEO.

- Existing Chart of accounts is adequate to properly account for and report on activities, disbursement categories and revenues.
- Fixed Assets Register is managed by BISAN software and updated regularly.
- Physical inspection of the condition and location of assets are conducted on regular basis.
- The use of fixed assets is reviewed annually to ensure that the assets are in the best use and serve MADA Company's interest.
- Petty Cash amount is 7000 NIS, maximum expense amount is 1500 NIS.
- Logistic Officer is the petty cash custodian, all petty cash transactions have supporting documents. Regular count of petty cash is conducted by Finance Officer under supervision of Finance Manager.
- The Finance Department maintains a filling system for purchases, sales, receipts, and payments.
- Annual financial reports do not provide sufficient detailed information, such as aging or bad debt.
- MADA has appointed PWC to conduct Internal audit and has appointed Deloitte to conduct external audit.

Table 15 Financial Risk Matrix

Risk Description	Description of mitigation (areas of improvement)	Risk Owner
Delays in detecting financial misleads that may occur due to: - Human errors, and/or - Fraud and corruption	- Conducting regular checks and physical counts over the inventories by the financial personnel on a monthly basis. - MADA hires PWC to conduct internal audit which will reduce errors, fraud.	MADA

Our financial system assessment revealed that MADA has a good accounting and financial policies and procedures. MADA adopts a comprehensive financial manual, which needs to be approved by BoD. The financial manual clearly clarifies the best practice for the company and meet local and international standards. Furthermore, MADA appointed Deloitte Auditors to conduct external audit and PWC Auditors to conduct internal audit, this will ensure that MADA have strong internal control in place regarding segregation of duties, authorization, recording and custody of assets and ensure that MADA have strong reporting system which complied to IFRS and local laws and regulation applied in Palestine and will ensure that MADA will establish and maintain policies and procedures that integrate the World Bank's requirements.

Annex II: MADA Al-Arab's Organizational Readiness & Clearance

Legal Structure

Mada Al-Arab For General Services Company is a private entity licensed by Ministry of National Economy (MoNE) since January 6, 2009, under registration no. 562480616, with an authorized and registered capital amount of USD 1,500,000 divided into 1,500,000 shares.

The authorization to sign administrative, legal, and shareholders affairs are:

- For Transactions less than USD 50,000; two signatures together are required from the Chief Executive Officer (CEO), the Chief Operation Officer (COO), the Chief Technology Officer (CTO) and/or the Chief Commercial Officer (CCO).
- For Transactions above USD 50,000; one signature is required from the CEO, COO, CTO or the CCO with one signature from other board members (representatives of Massader Co. partner).

As a business operating in Palestine, Mada Al Arab is registered at the Income Tax Department according to the Palestinian Income Tax Law Number Eight for the year 2011, and it has a valid clearance from income tax. In addition, local sales and purchases are also subject to Value Added Tax (VAT) at 16% rate. The company has a VAT clearance certificate, valid until December 2021, and renewed regularly.

Ownership and Management

MADA is established and owned by a mix of three companies and two individuals. The Company's Board of Directors (BoD) consists of seven seats (members); a seat for each owner, except for Massader Company with three representatives. More details on the governing board and executive management for the Company are provided in the tables below.

Table 16 Ownership

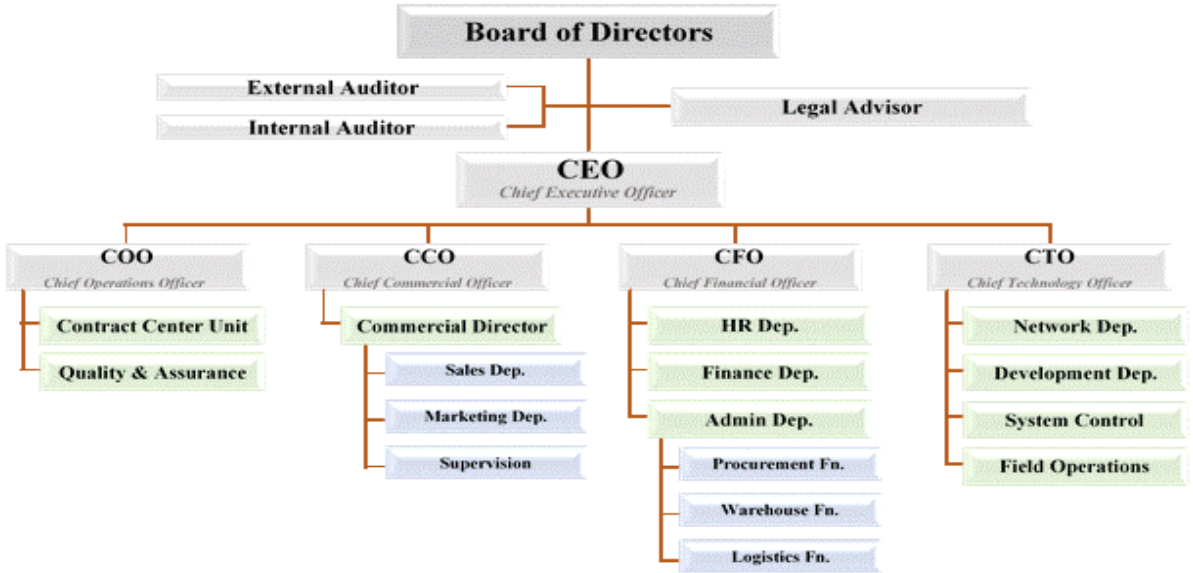
#	Name	Representatives	Description	Equity	ID #
1	Jafra Company for Finance & Management Consultations.	Mohammad Al-Alami	Chairman (**CEO**)	280,000 shares	562580530
2	Massader Company for Developing Natural Resources and Infrastructure Projects.	Azem Bishara	Deputy Chairman	450,000 shares	562546523
		Safa Nasir Al-din	Board member		
		Jamal Haddad	Board member		
3	Old City Company for Financial Investment and Supplies	Amjad Ghosheh	Board member (**COO**)	280,000 shares	562580522
4	Ashraf Tawfeeq Ahmed A'teeq	*Self-representing*	Board member (**CCO**)	280,000 shares	931068399
5	Raja'i Amel Khaleel Saeed	*Self-representing*	Board member (**CTO**)	210,000 shares	908118698

Table 17 Top Management's Bio

Name	Position	Bio & Qualifications
Mohammed Al-Alami	**CEO**	- Holder of a BA degree in Accounting - Responsible for MADA's Financial Strategy and supervision of operations. - Experienced with more than 25 years in financial management and accounting. - Former BoD member at United Securities, former customer care director at Paltel, and former CFO of Masrouji Company.

		- Investor in several startup companies; established three companies operated in the Middle East.
Amjad Ghosheh	**COO**	- Holder of a BA degree in Mechanical Engineering, MBA. - More than 20 years of experience in the fields of telecommunications, management, and engineering. - Responsible for operations' management at MADA, MADA's call center, customer care, technical support, quality assurance, and income assurance. - Former risk management director (RMD) at Paltel.
Ashraf A'teeq	**CCO**	- Holder of a BA degree in Economics. - Responsible for business development activities, and MADA's commercial strategy. - Former sales director at Paltel: restructured sales' management, organized an increased number of sales' fairs, signed several agreements with major corporate clients and organizations. - More than 24 years' executive experience in telecom services and banking. - Former corporate sales director at Paltel Group. - Former revenue assurance officer at Bank of Jordan.
Raja'i Saeed	**CTO**	- Holder of a BA degree in electrical engineering. - Responsible for the management of all technical process and developmental plans; both strategic and technical. - Equipped with more than 18 years' experience in IT, telecom, and ISPs. - Former CTO at PALTEL Group/Hadara, Former CTO for B-Net and BCI. - Holds professional certifications in CCNA, CCNP, CISCP, SANS, LINUX, RH, JAVA. - Participated in establishing three startup companies in the Middle East, including a marketing company (Creative, 2008). - National expert on TCP/IP, IPV4, IPV6, open-source programing and database management.

*Figure SEQ Figure * ARABIC6 MADA Organizational Structure*



Financial Status

Following is a 3-year analysis for the historical records of MADA Al-Arab's financial statements covering the period 2018 to 2020. Worth mentioning, the following analysis does not affect the anticipated business plan and financial model for the FTTH/B project; its more to demonstrate the management's performance from a financial aspect; analyzing its liquidity, solvency, and capacity to implement the new project efficiently.

Assumption

The analysis is based on the following:

- The audited financial statements correspond to Mada Al Arab Company for General Services.
- All the figures are in USD since this is the official reporting currency of MADA Company.
- The audited financial statements correspond to the 2018, 2019, and 2020 data.
- Analysis provided is based on the statements of: (a) the Financial Position (Balance Sheet), (b) the Profit and Loss (Income Statement), and (c) Cashflow statement.

Assets

Total assets almost doubled during the years 2018 to 2020, from USD 8,040,000 in 2018 to USD 15,723,000 by 2020[7]; divided (almost) evenly between current and fixed assets.

Net fixed assets balance settled at USD 4,073,000, USD 6,550,000, and USD 7,800,000 as of the end of 2018, 2019, and 2020; respectively, recording 61% in 2019 and 19% in 2020 compared to previous year's balance. With 90% representation, property plant and equipment (PP&E) is the major component for the fixed assets balance.

Current assets on the other hand reached USD 7,923,000 by the end of 2020, recording a percentage increase of 29% compared to USD 6,134,000 by 2019 and USD 3,967,000 by 2018. USD 5,702,000 of current assets are net receivables, USD 1,252,000 are cash and cash equivalents, while remaining USD 969,000 represents prepaid expenses, inventory, and other current assets. The following table provides more details about the components of MADA's assets as of the end of 2020:

Table 18 MADA Assets structure

Asset component (USD)		2020	% of total assets	
Current assets	Accounts receivable	5,702,000	36%	50%
	Cash & cash equivalent	1,252,000	8%	
	Other current assets	969,000	6%	

[7] Worth mentioning, as of H1/2021, interim (unaudited) statements recorded an increase in total assets of USD 1,237,000 compared to 2020's balance, to reach a value of USD 16,960,000

Non-current assets	Property Plant and Equip.	6,997,000	45%	50%
	Other Non-Current Assets	803,000	5%	
Total assets		**15,723,000**	**100%**	

Liabilities Structure

By the end of 2020, total liabilities recorded a balance of USD 10,367,000 representing 66% of total assets. Current liabilities settled at USD 6,654,000; representing 64% of total liabilities. The following table provides more details about the components of MADA's liabilities as of the end of 2020:

Table 19 MADA Liabilities structure

Liability component (USD)		**2020**	**% of total liabilities**	
Current liabilities	Accounts payable	2,202,000	21%	64%
	Short-term loans	2,326,000	22%	
	Other Current Liabilities	2,126,000	21%	
Long-term liabilities	Unearned revenue	2,756,000	27%	36%
	Provision for end of service	537,000	5%	
	Other long-term liabilities	450,000	4%	
Total liabilities		**10,367,000**	**100%**	

Net Worth Structure

Owner's paid-in capital stood at USD 1,500,000 during the analysis period of 2018 to 2020. As of the end of 2020, MADA recorded: (a) compulsory and statutory reserve balances of USD 668,000 and USD 293,000 respectively, and (b) returned earnings balance of USD 2,895,000. Accordingly, the total net wealth witnessed an incremental growth during the last 3 years, to stand at a balance of USD 5,356,000 by the end of 2020.

Income Statement Assessment

MADA sales jumped from USD 13,715,000 in 2018 to USD 16,445,000 in 2020, repressing 20% growth compared to the base year (2018). However, MADA's net income for years 2018, 2019 and 2020 recorded approximately the same result, recording USD 2,844,000, USD 2,881,000, and USD 2,824,000 respectively. Following are summary income statements covering MADA Al-Arab operations' results for the years 2018 to 2020:

Table 20 MADA Income Statements

Income statement (USD)	**2018**	**2019**	**▲ 2018 vs 2019**	**2020**	**▲ 2019 vs 2020**
Net sales	**13,715,000**	**14,619,000**	6.6%	**16,445,000**	12.5%

Cost of sales (cost of services)	(4,870,000)	(6,367,000)	30.7%	(8,036,000)	26.2%
Gross Profit	**8,845,000**	**8,252,000**	-6.7%	**8,409,000**	1.9%
Gross profit margin (% of net sales)	***65%***	***56%***		***51%***	
G&A exp. (net)	(4,396,000)	(3,845,000)	-12.5%	(4,089,000)	6.3%
EBITDA	**4,449,000**	**4,407,000**	-0.9%	**4,320,000**	-2.0%
EBITDA margin (% of net sales)	***32%***	***30%***		***26%***	
Interest exp.	(76,000)	(47,000)	-38.2%	(106,000)	125.5%
Depreciation and amortization exp.	(1,164,000)	(1,162,000)	-0.2%	(1,284,000)	10.5%
Profit before tax	**3,209,000**	**3,198,000**	-0.3%	**2,930,000**	-8.4%
Profit before tax margin (% of net sales)	***23%***	***22%***		***18%***	
Taxes exp.	(364,000)	(317,000)	1.3%	(106,000)	-66.6%
Net profit	**2,845,000**	**2,881,000**	1.3%	**2,824,000**	-2.0%
Net profit margin (% of net sales)	***21%***	***20%***		***17%***	

Cash Flow Statement Assessment

From the table below, it could be noted that MADA managed to allocate its resources efficiently to meet its short and mid-term obligations. The following table provides summarized results for cash movement among the varied activities within the company for the last 3 years:

Table 21 MADA Cash Flow Allocation

Cash flow activities (USD)	2018	2019	2020
Cash inflow (outflow) from operational activities	5,704,000	3,946,000	5,185,000
Cash inflow (outflow) from investing activities	(2,496,000)	(1,518,000)	(3,042,000)
Cash inflow (outflow) from financing activities	(3,640,000)	(1,901,000)	(1,802,000)
Net cash flow for the year	**(432,000)**	**527,000**	**341,000**
Cash balance (beginning of year)	816,000	384,000	911,000
Ending cash balance for the year	**384,000**	**911,000**	**1,252,000**

Liquidity vs. Solvency Ratios' Analysis

The following table illustrates chosen liquidity and solvency ratios; reflecting MADA's ability to meet its short-term (liquidity) and long-term (solvency) obligations, considering the nature of MADA's operations and the components of its financial position and profit & loss statements:

Table 22 MADA Liquidity vs Solvency Ratios

Ratio		Definition	Formulas[8]	2018	2019	2020
Liquidity	Current ratio	A company's ability to pay off its current liabilities	CA / CL	1.02 *(x)*	1.29 *(x)*	1.19 *(x)*
	Quick ratio	A company's ability to meet its short-term obligations with its most liquid assets	(C+AR) / CL	0.90 *(x)*	1.17 *(x)*	1.05 *(x)*
	Day's sales outstanding	The average number of days it takes a company to collect payment after it makes a sale	Av. AR / Sales * 365	107 *(days)*	97 *(days)*	115 *(days)*
Solvency	Debt-to-assets	How much of the company is funded by debt versus assets	D / TA	17%	12%	15%
	Debt-to-equity	How much of the debt can be covered by equity in case of liquidation	D / E	69%	33%	43%
	Equity ratio	How much of a company is funded by equity as opposed to debt	E / TA	24%	36%	34%

Both liquidity and solvency ratios indicate as efficient management by MADA for its resources. Considering MADA's solid and expanding financial position over the years 2018-2020, the new loan (of USD 5.0 Million) will keep MADA solvent enough to meet its futuristic obligations.

Institutional arrangements

Managerial Arrangements

The institutional and management agreement set for MADA Al-Arab Company are as follows:

Table 23 Key Stakeholders

Company	Description	Role
Mada Al-Arab Company for General Services	Sponsor	The initiator of FTTH/B project. Will ensure that the project delivers the targeted benefits.
Arab Bank	Lender	In February 2021, Arab Bank approved granting MADA Al-Arab Co. a loan of USD 5.0 Million with an amortization period of 48 months, payments will be due after 12 months (grace period) after making the first withdrawals by MADA Al-Arab Co.
- Jafra Co. (Mohammad Alami) - Massader Co. - Old City Co. (Amjad Ghosheh) - Ashraf A'teeq	Shareholders	The shareholders will inject additional 1.5M USD
	Guarantors	Will guarantee Mada's debt (the loan) if Mada is unable to settle Arab Bank's obligation.

[8] Acronyms used: **CA** = current assets - **CL** = current liabilities - **C** = cash - **AR** = accounts receivable - **D** = total debt - **TA** = total assets – **E** = total equity

- Raja'i Saeed		

- MADA Al-Arab Co. has finished GIS Planning and mapping.
- MADA Al-Arab Co. has successfully implemented a pilot project of connecting FTTH/B in Ramallah City (Ein Munjed residence) of 20 Km's and has obtained 200 new customers.

Contractual arrangements

MADA Al-Arab Co. has obtained all the required licenses to start the project; a license from Ministry of National Economy (MoNE) since 2009, and a special license for Broad Band services from Ministry of Telecommunication and Information Technology (MTIT) since 2019.
In addition, MADA Al-Arab Co. managed to sign the following agreements and arrangements:

1- In April 2021, MADA Al-Arab Co. had signed a contract with Jerusalem District Electricity Company (JDECO) as the owner of electricity infrastructure in Ramallah and Bethlehem Cities. Under this contract, MADA can use JDECO's infrastructure to establish its FTTH/B network in the mentioned cities.
   Worth mentioning; signed contract with JDECO will not result in monopolizing Fiber Optics (FO) connectivity to MADA alone. In fact, it's stated clearly that JDECO has the right to sign similar contracts with other ISP's.
2- In August 2021, MADA had signed a letter of intent (LOI) with Nokia Solutions and Networks "Israel", to provide the required equipment for FTTH/B project with an amount of EUR 2.2 Million.
3- Machinery and equipment: required construction works, equipment, and other CAPEX will be acquired using procurement and financial manuals and procedures accepted by PIA and the WB teams.

Investor clearance

In its most recent record received by the Palestinian Ministry of Justice from the competent authorities, Mada Al-Arab For General Services Company is legally not convicted with any criminal records by the Palestinian Judiciary. Additionally, below is the DAI's internal approach (methods used) to test compliance check for MADA Company:

Approach

Finance for Jobs used three methods to test the compliance status of the ICF Investors Companies and related individuals. The PIA searched the System for Award Management (SAM) for each vendor the PIA anticipates making an award to. Proof of these searches will be kept in the PIA's soft copy files. The PIA has also searched OFAC and UN Sanction lists and has saved copies of the results. It is worth mentioning that the process, procedures, and results are not considered vetting as the PIA does not have any means to ensure that the results are 100% clear.

The three methods used are:

1- SAM Search

2- OFAC Sanctions List
3- UN Sanction List

SAM Search

The System for Award Management (SAM) is an official website of the U.S. government. There is no cost to use SAM. You can use this site for FREE to:

- Register to do business with the U.S. government
- Update or renew your entity registration
- Check the status of an entity registration
- Search for entity registration and exclusion records

https://sam.gov/content/home

OFAC Search

This Sanctions List Search application ("Sanctions List Search") is designed to facilitate the use of the Specially Designated Nationals and Blocked Persons list ("SDN List") and all other sanctions list administered by OFAC, including the Foreign Sanctions Evaders List, the List of Persons Identified as Blocked Solely Pursuant to E.O. 13599, the Non-SDN Iran Sanctions Act List, the Part 561 list, the Sectoral Sanctions Identifications List and the Non-SDN Palestinian Legislative Council List. Given the number of lists that now reside in the Sanctions List Search tool, it is strongly recommended that users pay close attention to the program codes associated with each returned record. These program codes indicate how a true hit on a returned value should be treated. The Sanctions List Search tool uses approximate string matching to identify possible matches between word or character strings as entered Sanctions List Search, and any name or name component as it appears on the SDN List and/or the various other sanctions lists. Sanctions List Search has a slider-bar that may be used to set a threshold (i.e., a confidence rating) for the closeness of any potential match returned as a result of a user's search. Sanctions List Search will detect certain misspellings or other incorrectly entered text and will return near, or proximate matches, based on the confidence rating set by the user via the slider-bar. OFAC does not provide recommendations about the appropriateness of any specific confidence rating. Sanctions List Search is one tool offered to assist users in utilizing the SDN List and/or the various other sanctions lists; use of Sanctions List Search is not a substitute for undertaking appropriate due diligence. The use of Sanctions List Search does not limit any criminal or civil liability for any act undertaken as a result of, or in reliance on, such use.

https://sanctionssearch.ofac.treas.gov/

UN Sanction List

Search UN Security Council Sanctions Lists

The Consolidated Sanctions List includes all individuals and entities subject to sanctions measures imposed by the Security Council. The inclusion of all names on one Consolidated Sanctions List is to facilitate the implementation of the measures, and neither implies that all names are listed under one regime, nor that the criteria for listing specific names are the same. For each instance where the Security Council has decided to impose sanctions in response to a threat, a Security Council

Committee manages the sanctions regime. Each sanctions committee established by the United Nations Security Council, therefore, publishes the names of individuals and entities listed in relation to that committee as well as information concerning the specific measures that apply to each listed name.

The current version of the Consolidated Sanctions List is provided in .xml, .html and .pdf formats. Member States are obliged to implement the measures specific to each listed name as specified on the websites of the related sanctions committee.

The List established and maintained pursuant to Security Council res. 1267/1989/2253

Generated on January 18th, 2022 ("Generated on" refers to the date on which the user accessed the list and not the last date of substantive update to the list). Information on the substantive list updates is provided on the Council / Committee's website." Composition of the List consists of the two sections specified below: A. Institutions and other groups, and B. Related individuals and owners

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019D1341&from=en

Search Results

The results of the search using the three above tools suggest that all organizations and related individuals are clean.

ICF Investors

1. Mada Al-Arab for General Services Company

Institution(s)

Company Name	**SAM Search Result**	**OFAC Search Result**	**UN Search Result**
Mada Alarab For General Services Company	Clean	Clean	Clean
Jafra Company for Finance & Management Consultations	Clean	Clean	Clean
Massader Company for Developing Natural Resources and Infrastructure Projects.	Clean	Clean	Clean
Old City Company for Financial Investment and Supplies	Clean	Clean	Clean

Related individuals & Owners of the Company

Partner / Board Member	SAM Search Result	OFAC Search Result	UN Search Result
Mohammad Dawood Alami	Clean	Clean	Clean
Azem Elia Butros Bishara	Clean	Clean	Clean
Safa Ali Taha Nasir Aldin	Clean	Clean	Clean
Jamal Foad Jubran Haddad	Clean	Clean	Clean
Amjad Amen Saad Aldin Ghosheh	Clean	Clean	Clean
Ashraf Tawfeeq Ahmed A'teeq	Clean	Clean	Clean
Raja'i Amel Khaleel Saeed	Clean	Clean	Clean

ANNEX III: RISK ANALYSIS

Risk Description	Description of mitigation	Risk owner
Delay in delivering materials, tools, and equipment required for the installation and implementation of the FO network due to political/ boarder control procedures	MADA will work on obtaining required licensing and arrangements to secure smooth delivery for imported equipment and tools. This will be accomplished through close cooperation with the MTIT	**MADA**
Delay in completing infrastructure works (Networking, installation, connecting buildings to optical connection nodes)	- MADA will cooperate with local municipalities, contracting agents, and buildings' owners to guarantee a flow of operations among related parties. - MADA will obtain required approvals to conduct any excavation works. - As well as informing related parties of intended works within certain geographical area prior to the initiation of these works.	**MADA**
Existence of PALTEL (dominant market leader (competitor)), owner of the existing telecom infrastructure and a broad share of targeted subscribers.	- Focus on providing well established, more qualified network with higher service quality while creating niche segment. This will be supported with the lowered price and the extended internet down/upload speeds provided. - Expanding partnership agreements with other utility and service providers (i.e., JDECO, HEPCO, NEDCO).	**MADA**
Procurement system is not in line with the best commercial practices	The PIA has developed a Procurement Policies and Procedures Manual based on Best Commercial Practices. MADA will tailor it to their needs and will adopt it in their daily operations. Such document will be shared with the World Bank for review and clearance.	**MADA**
Poor & disorganized vendor's management	- Having predefined lists of vendors saved within the company's database for frequent orders. - Automating the vendor management mechanisms with proper documentation.	**MADA**
Delays in detecting procurement misleads that may occur due to: - Human errors, and/or - Fraud and corruption	- Implementing effective mechanisms of segregating duties throughout the process. - Create a new rule of internal auditing within the company to conduct continuous audit over the compliance with the approved manual.	**MADA**
Delays in Delivery of the required equipment	MADA have prepared a long-Term procurement plan in order to ensure that delivery of equipment and material will be on time	**MADA**

Risk Description	Description of mitigation	Risk owner
Delay in delivering materials, tools, and equipment required for the installation and implementation of the FO network due to political/ boarder control procedures	MADA will work on obtaining required licensing and arrangements to secure smooth delivery for imported equipment and tools. This will be accomplished through close cooperation with the MTIT	**MADA**
Delay in completing infrastructure works (Networking, installation, connecting buildings to optical connection nodes)	- MADA will cooperate with local municipalities, contracting agents, and buildings' owners to guarantee a flow of operations among related parties. - MADA will obtain required approvals to conduct any excavation works. - As well as informing related parties of intended works within certain geographical area prior to the initiation of these works.	**MADA**
Existence of PALTEL (dominant market leader (competitor)), owner of the existing telecom infrastructure and a broad share of targeted subscribers.	- Focus on providing well established, more qualified network with higher service quality while creating niche segment. This will be supported with the lowered price and the extended internet down/upload speeds provided. - Expanding partnership agreements with other utility and service providers (i.e., JDECO, HEPCO, NEDCO).	**MADA**
	and will not cause any delay in FTTH project's implementation plan.	
Delays in detecting financial misleads that may occur due to: - Human errors, and/or - Fraud and corruption	- Conducting regular checks and physical counts over the inventories by the financial personnel on a monthly basis. - MADA hires PWC to conduct internal audit which will reduce errors, fraud.	**MADA**

ANNEX IV: SOCIO COST BENEFIT ANALYSIS FRAMEWORK

<table>
<tr><th>Benefits</th><th>Methods of Calculation</th></tr>
<tr><td>Direct labor</td><td>It is the difference between the gross salary and personal income tax, multiplied by the cost of labor: (w*(1-u)). Where, (w) is the wages as provided by the IFC Financial Model less personal income tax and (u) is the unemployment rate.

A total of 261 direct labors will be involved in MADA's FTTH/B project. 143 construction and installation workers are required to finish the installation works and infrastructure build for the project. 118 permanent jobs will exist and hired by MADA to perform operational duties; technicians, sales personnel, support, marketing, HR and admin, procurement, and warehousing.</td></tr>
<tr><td>Indirect Labor</td><td>The economic benefit of indirect jobs is calculated at the opportunity cost of net salaries ((w*(1-u)).

In order to estimate the indirect jobs, the results of the Computable General Equilibrium model (CGE) conducted for West Bank and Gaza by the World Bank was used. The model simulates potential labor market impacts of investments across sectors in construction, agriculture, and manufacturing processes. Thus, according to the CGE approach that for an investment of around USD 7,500,000 in the construction and installation phase, 106 jobs will be created. For remaining investment of around USD 409,000 in Science and Technology, 3 jobs will be created.</td></tr>
<tr><td>Social Externalities</td><td>The social value of labor externalities intends to determine the societal benefits beyond the fundamental and immediate contribution of earnings. The DCE results provide a dollar value to capture the social value of jobs categories, referred to as Willingness to Pay (WTP). Accordingly, the average WTP for this project is an additional USD 0.25 for each dollar paid to labor externalities (direct and indirect).

<table>
<tr><th>WTP</th><th></th><th></th></tr>
<tr><td></td><td>USD/Year/Job</td><td># Jobs</td></tr>
<tr><td>Young+Female+Skilled</td><td>0.56</td><td>22</td></tr>
<tr><td>Young+Female+non-skilled</td><td>(0.03)</td><td>8</td></tr>
<tr><td>Young+Male+Skilled</td><td>0.29</td><td>93</td></tr>
<tr><td>Young+Male+non-skilled</td><td>(0.29)</td><td>32</td></tr>
<tr><td>Adult+Female+Skilled</td><td>0.50</td><td>29</td></tr>
<tr><td>Adult+Female+non-skilled</td><td>(0.08)</td><td>10</td></tr>
<tr><td>Adult+Male+Skilled</td><td>0.24</td><td>131</td></tr>
<tr><td>Adult+Male+non-skilled</td><td>0.35</td><td>45</td></tr>
<tr><td>Total Jobs</td><td></td><td>369</td></tr>
<tr><td>WTP</td><td></td><td>0.25</td></tr>
</table>
</td></tr>
<tr><td>Tax Revenue</td><td>Personal Income Tax: refers to the personal income tax paid by employers on behalf of their employees. It is assumed to be about 7% of gross salary for construction, installation, and operational jobs.
Corporate Income Tax: refers to the income tax companies pay for its profits.

Upstream Multiplier: refers to the overall effect on tax benefits to government of backward linkages. A normal value could be between 1.4 to 1.8. The model computes the first, 1.4.</td></tr>
</table>

	Downstream Multiplier: refers to the overall effect of tax benefits to government of forward linkages. The model computes the 1.4.
Returns to Capital	The model suggests that Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) needs to be reduced by the amount that the capital could have earned if it was simply lent by a Bank. Considering that the cost of debt is about 4 %, earnings before interest, taxes, and depreciation and amortization (EBITDA) will be reduced by about USD 300,000.
Cost	**Methods of Calculation**
General factor	It refers to an intrinsic development cost defined as a percentage of the investment cost. A WB's benchmark is 80% of the total investment cost.
Deadweight	It refers to the negative impacts at a cause of the investment, as it could have replaced or deferred unforeseen investments, elsewhere. The WB benchmark is in the range of 0%-25% as a percentage of the investment cost. SCBA model suggests a share of 5% of the total investment cost.
Displacement	It refers to the negative externalities at a cause of the investments, as it could have encouraged the unforeseen reallocation of other investments. The WB benchmark is in the range of 0%-25% as a percentage of the investment cost. SCBA model suggests a share of 10% of the total investment.
Counterfactual	It refers to the general foregone benefits that could have been generated without the implementation of the project. SCBA model suggests a share of 10% of the total investment cost to be considered as an economic cost for the project.
Tax Collection	It refers to the operating expenses borne by the government for the collection of taxes, and it is calculated as percentage of the total revenue collection. The WB benchmark includes an overall tax administration cost of 10% and domestic operation administration cost of 80%.
Net Values	**Methods of Calculation**
Economic Net Benefit	The difference between the economic benefits and economic cost, not including Social Externalities.
Socio Economic Net Benefits	The difference between the economic benefits and economic cost, including Social Externalities.