BUSINESS CASE WATER SHOP CONCEPT

General Information		Solar radiation	5 hours per day	
Site	Gandinaghar, India	Equipment	Water: TWB 002	
Application	Drinking water for remote village		Solar: TSPC 700 4/8	
Installation	Fixed installation	Salinity	none	
Water source	River water/well water	Contamination	organic (e.g. bacteria, virus, spore)	

Technical Data			
Capacity of the unit		900.0	l/h
Power Requirement		350.0	Wh
Provided Solar Power		1,480.0	Wp
Energy by radiation	5 kW/m₂/day	7,400.0	Wp
Power loss (cabling etc.)	20%	-1,480.0	Wp
Average energy supply		5,920.0	Wp/day
Runtime of the unit		16.9	h/day
Total capacity		15,222.9	I/day

Drinking water costs			
Investment costs consisting of:		60,000.00	US\$
Water and Solar Equipment		50,000.00	US\$
Water source development		5,000.00	US\$
Infrastructure Water Shop		5,000.00	US\$
Annual amortisation	5 years	12,000.00	US\$
Annual interest rate	10%	3,000.00	US\$
Annual maintenance costs (estimation)		600.00	US\$
Total costs per year		15,600.00	US\$
Total amount of water production per year		5,556,342.9	l/year
Amount of water sold per year	50%	2,778,171.4	l/year
Price per litre of drinking water 0.			US\$
Price per m₃ drinking water			US\$

Business Model			
Sales price per litre		0.015	US\$/I
Costs per litre		0.0056	US\$/I
Gross Margin		0.0094	US\$/I
Gross Earnings		26,072.57	US\$/year
Participation of Watershop Operator	20%	5,214.51	US\$
Participation of Franchise Organisation	60%	15,643.54	US\$
Misceallaneaus costs (Expenses, Transport)	15%	3,910.89	US\$
Net Earnings		1,303.63	US\$/year

Rentability for Fund/Bank			
Number of Water Shops		50	Units
Total Investment	50 x 60,000.00	3,000,000.00	US\$
Total Earnings	50 x 1,303.63	65,181.43	US\$
Total interest rates for equipment	50 x 3,000.00	150,000.00	US\$
Return on Investment		7.17%	per year

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