



AFRIVAC

Initiating Social Business for Public Health in Africa

Senegalese immunization budget, like 38 other African countries, is significantly supported by Gavi, the Vaccine Alliance and Partners

This financial support has led to substantial improvements in the Expanded Program for Immunization performance with high rates of coverage around 80% on average in all supported countries

Despite the government's efforts to increase the budget allocated to immunization, GAVI's future withdrawal will result in a funding gap to be filled in order to sustain the results in terms of immunization coverage.

Therefore, there is an urgent need for a combined immunization financing process including private sector's contribution to prevent the risk of immunization coverage rate decrease and the resurgence of eradicated diseases.

In this context, Afrivac after having sensitized the major part of the Senegalese private sector, is initiating a social business for funding children immunization in Africa. For its next 3 years phase, Afrivac aims to consolidate its work and innovate with two new goals.

- Generating own resources for vaccine purchase using Islamic finance via this amazing solution named Waqf
- Setting up innovative mechanisms for immunization funding using banking products

WHAT IS WAQF

Waqf, as a nonprofit transaction is the Islamic solution for public finance deficits. It is defined as the concept of dedicating any property for posterity from which profit has to be used for a charitable intention.

Waqf as charity has a history older than Islam; it has existed in ancient Mesopotamia, Greece, Rome as well as pre-Islamic Arab Societies. Lately, all empires that ruled on Muslim territories have given a crucial place to Waqf institution as a tool to develop and secure the welfare of Muslim communities.

Indeed, throughout History, Muslim civilizations have adopted the concept of Waqf mainly to mitigate the burden of public services.

On the Public side, Morocco is the best example of Waqf application with a whole department dedicated to waqf (habous) with main areas of intervention including: Traditional education and the supervision of the program to combat illiteracy. The Ministry of Habous patrimony is made up of urban properties, mainly income properties, and agricultural properties. The income obtained from the exploitation of these goods at the urban level was close to 336 million DH in 2017. While the net agricultural results achieved for the 2016/2017 season reached nearly 87 million DH.

On the private sector side, the IDB's APIF fund, created in 2001, has the mission of revitalizing the Waqf in Muslim countries for their social impacts.

The IDB therefore offers financing for commercial properties, with a minimum contribution of \$ 5 million and up to \$ 15 million. Small projects will be eligible for the opening of a bank financing line refinanced by a local bank.

To date, some 60 projects have benefited from IDB support in 30 countries around the world. Below are some examples



Guinée Conakry , a complex with 2 building dedicated to education



Commercial residential complex in Soudan for orphan education and medicine studies



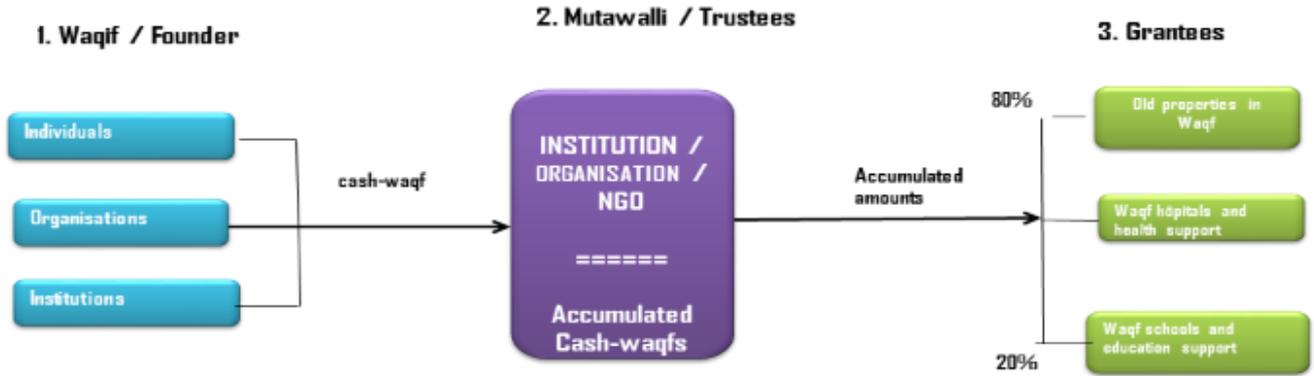
Project in Conakry for disabled and orphans.
Cost: US\$ 76 Millions



Senegal Project for koranic schools

Using Islamic Finance to sustainably fund Immunization

General Structure of Cash Waqf Operation



Afrivac has chosen Waqf as a financial tool to set up a sustainable solution to support government's efforts for immunization national budget covering in addition to Gavi's support in the first time and to replace this aid when the country is no longer eligible.

In the Senegalese case, where the first waqf for vaccine purchase will take place in 2019, the economic sectors selected for this social investment are real estate and solar energy. To take profit of their good RoI (more than 15%) and for the facility of their realization.

These activities require a contribution of land essential to their achievements. We then, in accordance with the status of private public partnership of our organization, solicited and obtained the contribution of the state of senegal which will grant us on lightened conditions the parcels which we will need once the project defined. Below is an example of application to ensure a permanent contribution of nearly 10% of the national immunization budget every year from 2021

INVEST IN REAL ESTATE IN AFRICA TO FUND IMMUNIZATION

Waqf Real Estate Project for Vaccine Purchase

Financial Plan

Needs		Funding		
25%	A plot of land of 1500 m2 Value: US\$ 2,600,000	Land allocated by the Government in its heritage. Payment will be in kind by 20% of the total surface of the building	25%	Gov. 25%
75%	Construction of a Building of 13 levels + 2 basements with 13,200 m2 . Cost US\$ 8,000,000	Afrivac collection US\$ 750,000	9%	Afrivac: 24%
		Afrivac Crowd funding for the inclusion of individuals engaged in country and the Diaspora: US\$ 1,500,000	15%	
		Patrons investing in bare ownership in the Waqf: US\$ 2,700,000	26%	Donors and Social Investors 51%
		Social investors lending at inflation rates over 7 years: US\$ 2,600,000	25%	

Income Statement		Year 1	7 years	From year 8
Total surface	m2	14 300	14 300	14 300
surface returning to state heritage	m2	2 860	2 860	2 860
Surface to rent by Afrivac' Waqf	m2	11 440	11 440	11 440
Total Rental Income	\$	1 757 421	12 301 945	1 757 421
CAPEX	USD	8 000 000		
% income on capex	%	22%		
OPEX	USD	351 484	2 460 389	351 484
loan disbursement		426 655	2 986 585	0
Amortization	USD	527 226	3 690 583	527 226
PROFIT	USD	452 055	3 164 387	878 710
Tax	USD	0	0	0
Net Profit	USD	452 055	3 164 387	878 710
Donation for Vaccine Purchase	USD	452 055	3 164 387	878 710
% of Total rental Income	%	26%	26%	50%
National needs for vaccine purchase	USD	9 482 759	66 379 310	9 956 897
% contribution on national vaccine budget	%	5%	5%	9%

INVEST IN SOLAR ENERGY CAN ALSO FUND IMMUNIZATION IN AFRICA

Needs		Funding		
20%	A plot of land of 20 000m2 Value: US\$ 4,000,000	Land allocated by the Government in its heritage. Payment will be in kind by 20% of the total surface of the building	20%	Gov. 20%
80%	Construction of a 20 megawatt solar power plant Cost: US\$ 16,000,000	Afrivac collection US\$ 1,000,000	5%	Afrivac: 17%
		Afrivac Crowd funding for the inclusion of individuals engaged in country and the Diaspora: US\$ 2,500,000	12%	
		Patrons investing in bare ownership in the Waqf: US\$ 6,500,000	33%	Donors and Social Investors 63%
		Social investors lending at inflation rates over 7 years: US\$ 6,000,000	30%	

Technical assumptions			
Plant capacity	20,00	[MGW]	
Construction start Up	01/09/2019	Date	
Start of production	28/02/2020	Date	
Solar radiation	2 360,00	Kwh/m2	
Yearly Production	33 000 000,00	KWh	
Annual production lost	0,008	[%]	
% of OPEX	0,04	[%]	
Price	0,12	USD/Kwh	
Price escalation	1,05	[%]	
Tax	0,25	[%]	
CAPEX	16 000 000,00	USD	
Inverters	20%	[%]	

Income Statement		FROM 2020 TO 2034
Energy Production	Kwh	777 447 253
Electricity Price	\$/Kwh	0,24
Energy Revenue	\$	188 462 122
CAPEX	USD	16 000 000
Change of invertors	USD	3 200 000
OPEX & G&A	USD	16 768 000
Amortization	USD	19 200 000
Profit/Lost	USD	152 494 122
Tax	USD	38 123 531
Cash Flow	USD	114 370 592
NPV	USD	19 744 917
IRR	%	22%
Donation for Vaccine Purchase	USD	130 370 592
% contribution on national vaccine budget	USD	32%

VALUE OF VACCINATION

Vaccines are one of the most successful and cost-effective health investments in history



Vaccination currently saves between 2 and 3 million lives every year.¹ Vaccines as public health tools – eradicating smallpox, containing polio to just three endemic countries and greatly reducing many other diseases – have an indisputable track record.

The impact of vaccines goes far beyond saving lives and improving health. Vaccination is in every sense an investment, with wider benefits that accrue across a lifetime.

A strand of recent research has focused on both short- and long-term, direct and indirect benefits of immunization – classifying them into “narrow” and “broad” categories.

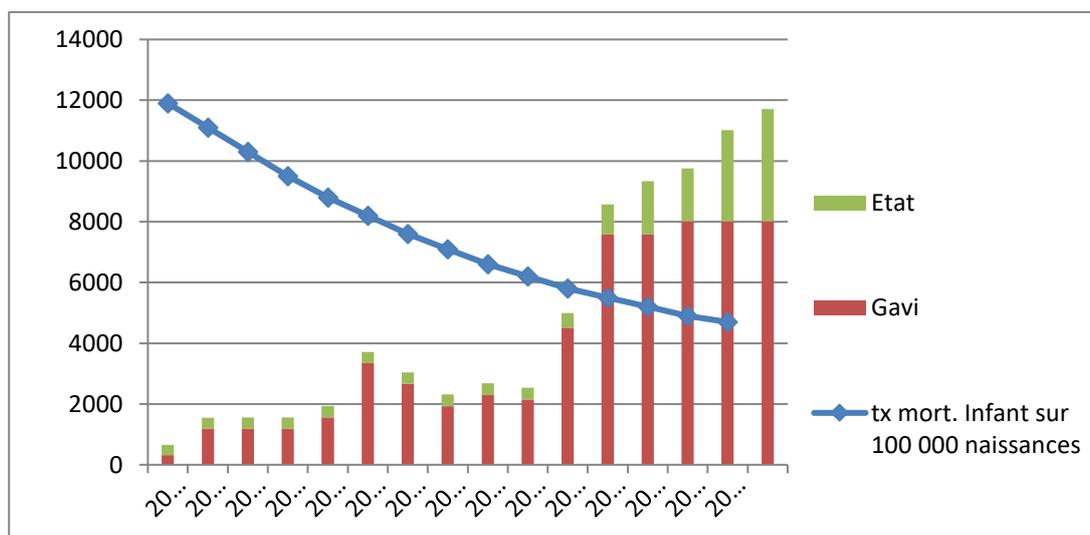
The **narrow** benefits of immunization are limited to preventing healthcare costs and loss of productivity for the patient and the person caring for him or her.

The recent move towards a **broader** approach to the benefits of vaccination shows that many other aspects of society and the economy are positively affected by immunization. For instance, by preventing illness, immunization improves a child's cognitive skills, physical strength and performance at school. In the long term, this leads to increased productivity.

By improving financial security and reducing risk, preventing illness through vaccination may lead to increased investment and improved political and economic stability. Through an effect known as herd immunity, it also helps to protect unvaccinated individuals in the community.

Source: www.gavi.org/about/value

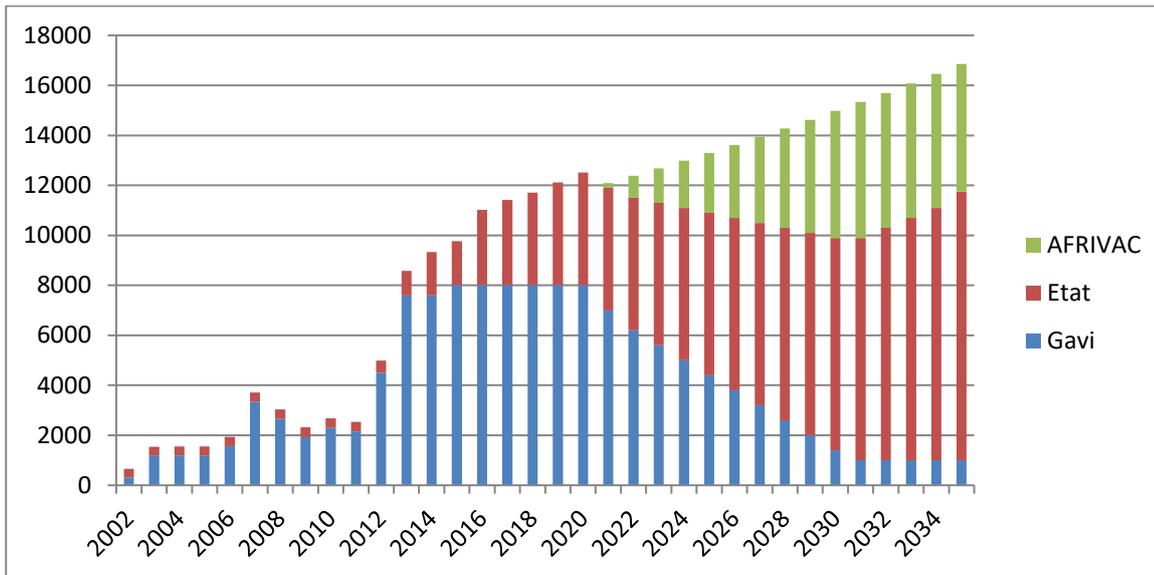
Immunization financing and evolution of the infant mortality rate in Senegal



AFRIVAC 'S PROJECT TO SUPPORT VACCINES PURCHASE

by collecting the contribution of private sector and donors, in order to invest in profitable business, Afrivac aims to provide support in addition to Gavi's at first and then in substitution when the transition is effective

Projected contributions to vaccine financing



Neighborhood Godmothers organizing the call and transport of young mothers to health center in Malem-Hodar Kaffrine – Sénégal

JOIN US

BECOME A SOCIAL INVESTOR FOR IMMUNIZATION IN AFRICA

- By Donation or Acquisition of equity interest in bare property
- By Acquisition of equity with donation of at least 50% of your income
 - By a zero interest loan over a period of 5 to 7 years

FONDATION AFRIVAC, 30 Ancienne Piste Sotrac Mermoz Dakar SENEGAL BP 16 161 Dakar Fann

Tel +221 33 860 10 00 Fax +221 33 860 93 13 email afrivac@afrivac.org www.afrivac.org