Gobierno de Reconciliación y Unidad Nacional

El Pueblo, Presidente!

2021 ESPERANZAS VICTORIOSAS! TODO CON AMOR!

MINISTRY OF HEALTH

GENERAL DIRECTORATE FOR HEALTH MONITORING

NICARAGUA IMUNIZATION PROGRAM.

30 APRIL, 2021

INTRODUCTION

Routine vaccination services in Nicaragua were implemented since approximately 1960, generally vaccinating on demand in the health units that existed at the time.

It is from the year 1980 that the government forms the Expanded Immunization Program (PAI), developing various vaccination strategies to widely offer vaccines to the Nicaraguan population.

MISSION AND VISION OF THE EXTENDED IMMUNIZATION PROGRAM

The Mission is to be a specialized instance of the Ministry of Health, in charge of the elaboration and fulfillment of the plans that guarantee the prevention, control, elimination and eradication of immunopreventable diseases.

The Vision is to dictate the guidelines to be followed in the effective, sustainable and equitable delivery of high-quality immunization services, within the framework of comprehensive care.

STRUCTURE OF THE PAI

The PAI at the national level is located in the General Directorate of Health Surveillance and it has a technical-administrative support team.

The PAI has, under its mandate, the National Center for Biologicals (CENABI), a warehouse with 8 cold chambers, where the reception, conservation, handling and distribution of vaccines to the 19 Local Systems of Comprehensive Health Care (SILAIS) is guaranteed.

VACCINATION STRATEGIES IN PLACE

Since its formation, the PAI has implemented different vaccination strategies and tactics with the aim of achieving optimal vaccination coverage ≥ 95%, keeping the population protected against 16 vaccine-preventable diseases.

Strategies:

Intramurals: Sistempatically administered in Health Units.

Extramurals: House to house visits, vaccination posts (installed in health units, schools, houses of leaders, and others), integral brigades to places of difficult geographic access, fairs and others.

HISTORY OF THE INTRODUCTION OF VACCINES TO THE NATIONAL SCHEME

Before 1998: BCG, polio, DPT and measles.

1998: MMR

1999: Pentavalent

2006: Rotavirus

2007: Seasonal Influenza

2010: Seasonal Pandemic Influenza AH1N1

2010: Pediatric pneumococcus (13 valent)

2014: Adult pneumococcus (23 valent)

2015: Inactivated Polio (IPV)

2021: COVID-19

IMPACT OF EPV BEHAVIOUR

Epidemiological Situation of Vaccine-preventable Diseases, notification of the latest cases:

Polio: 1981

Diphtheria: 1987

Measles: 1995

Rubella: 2005

Neonatal Tetanus: 2005

VACCINATION SCHEME 2021

The scheme contemplates a total of 10 vaccines, which are applied in the various vaccination strategies.

These are: BCG, injectable polio, oral polio, pentavalent, rotavirus, pediatric pneumococcus (13 valent), SRP or Triple Viral, DPT, dT, influenza, adult pneumococcus (23 Valente).

Other vaccines that are applied to risk groups: Hepatitis B, Yellow Fever, human rabies and MR.

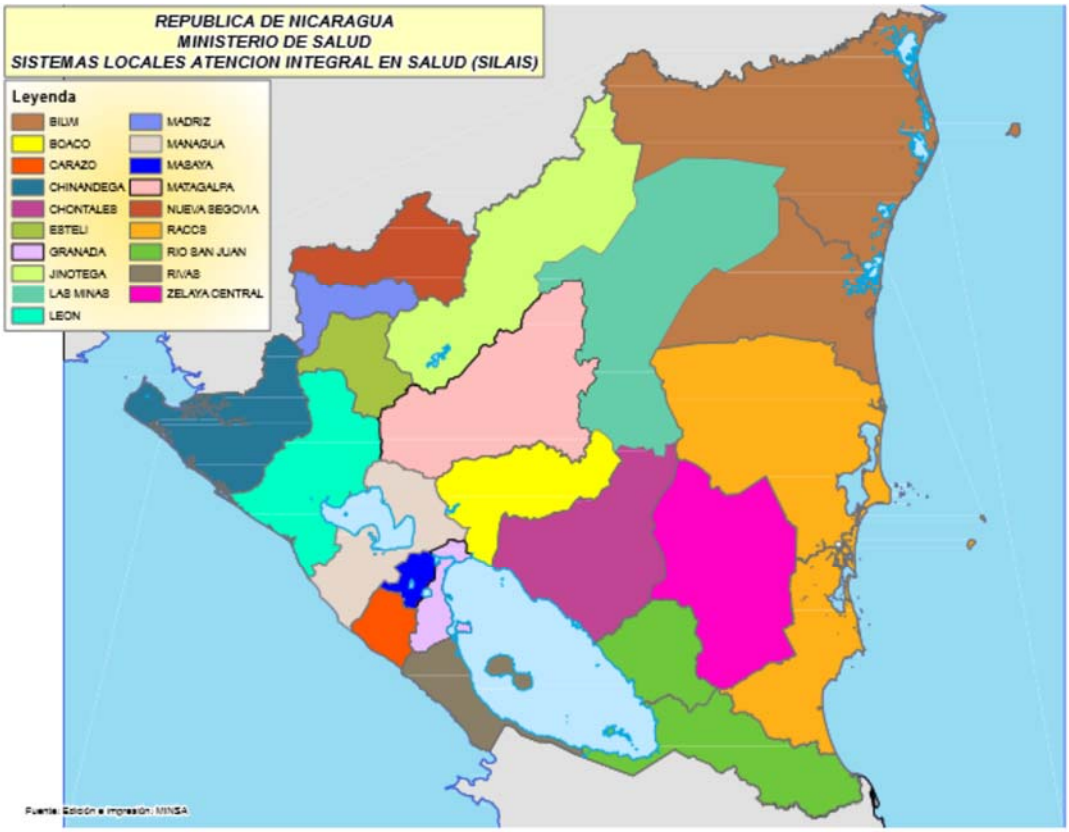
ORGANIZATION OF THE IMMUNIZATION PROGRAM

National Level
Primary: 1

19 Local Integral Health Systems (SILAIS)

153 Municipalities

2,780 Local Units (sectors)

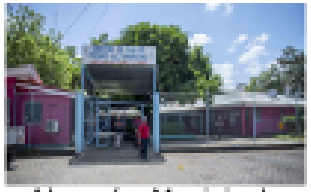


GENERAL VISION OF THE SUPPLY CHAIN

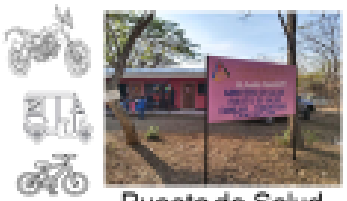
Estructura Logística

Almacén Nacional

Almacén SILAIS

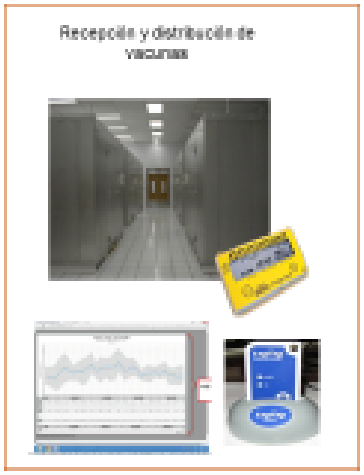


Almacén Municipal



Puesto de Salud

Sector de Salud



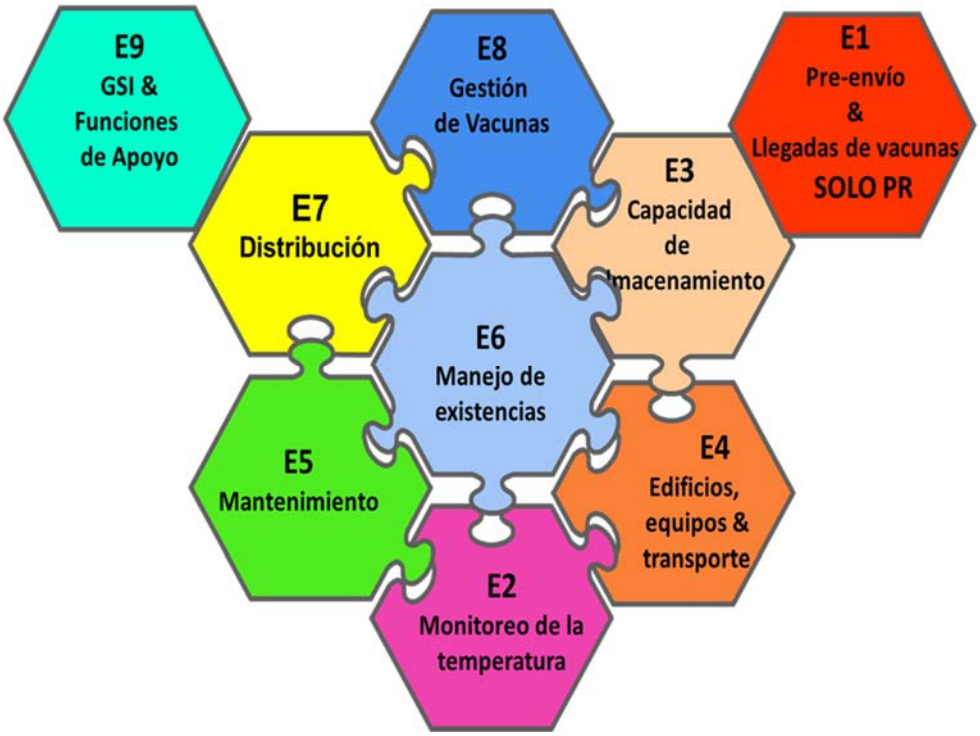
EVALUATION OF EFFECTIVE VACCINE MANAGEMENT, GEV

It is designed as an evaluation tool for the systematic analysis of strengths and weaknesses and that allows for the identification areas that need to be improved.

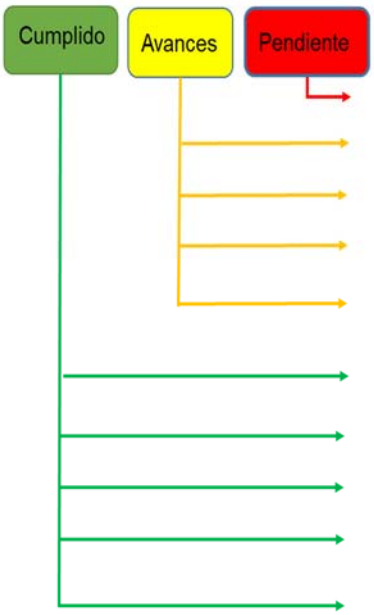
Nicaragua's score was 93%, placing the country in the first place out of 80 countries evaluated during that period.

It allows the development of actions to be planned in a Vaccine Management Quality Improvement Plan.

EVALUATION CRITERIA GEV



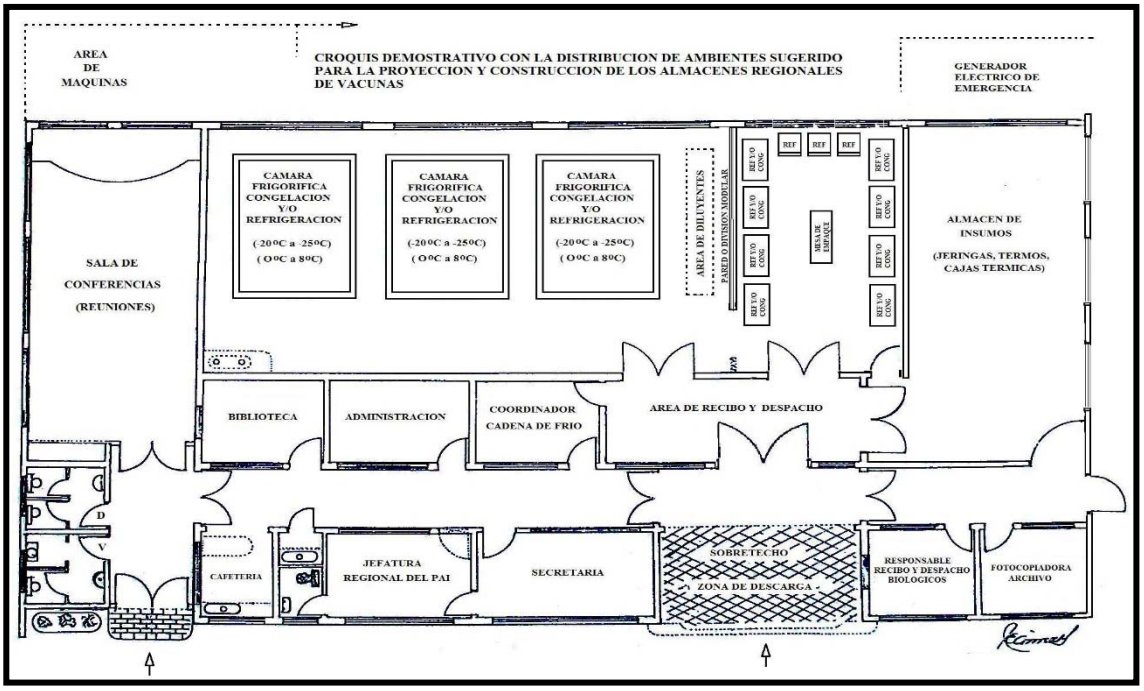
GEV EVALUATION IMPROVEMENT PLAN - COLD CHAIN



- Construcción de 4 Almacenes Regionales
- Adquisición de Vehículos Refrigerados
- Uso de Indicadores de Congelación
- Actualizar Norma del PAI
- Reemplazo Gradual de Equipos Frigoríficos, Generadores, Estabilizadores, Cajas Frías y Termos
- Estudio de Monitoreo de Temperatura
- Sistema Remoto de Monitoreo de Temperatura en Tiempo Real
- Inventario de Equipos Actualizado
- Mapeo de Temperatura
- Sistema de Control de Inventario en Web e Intranet Adquisición de Dispositivo de Monitorio de Registro Continuo 30 días

MONTO ESTIMADO PLAN DE MEJORA
US$1,500,000

CONSTRUCTION SCHEME OF A REGIONAL VACCINATION WAREHOUSE

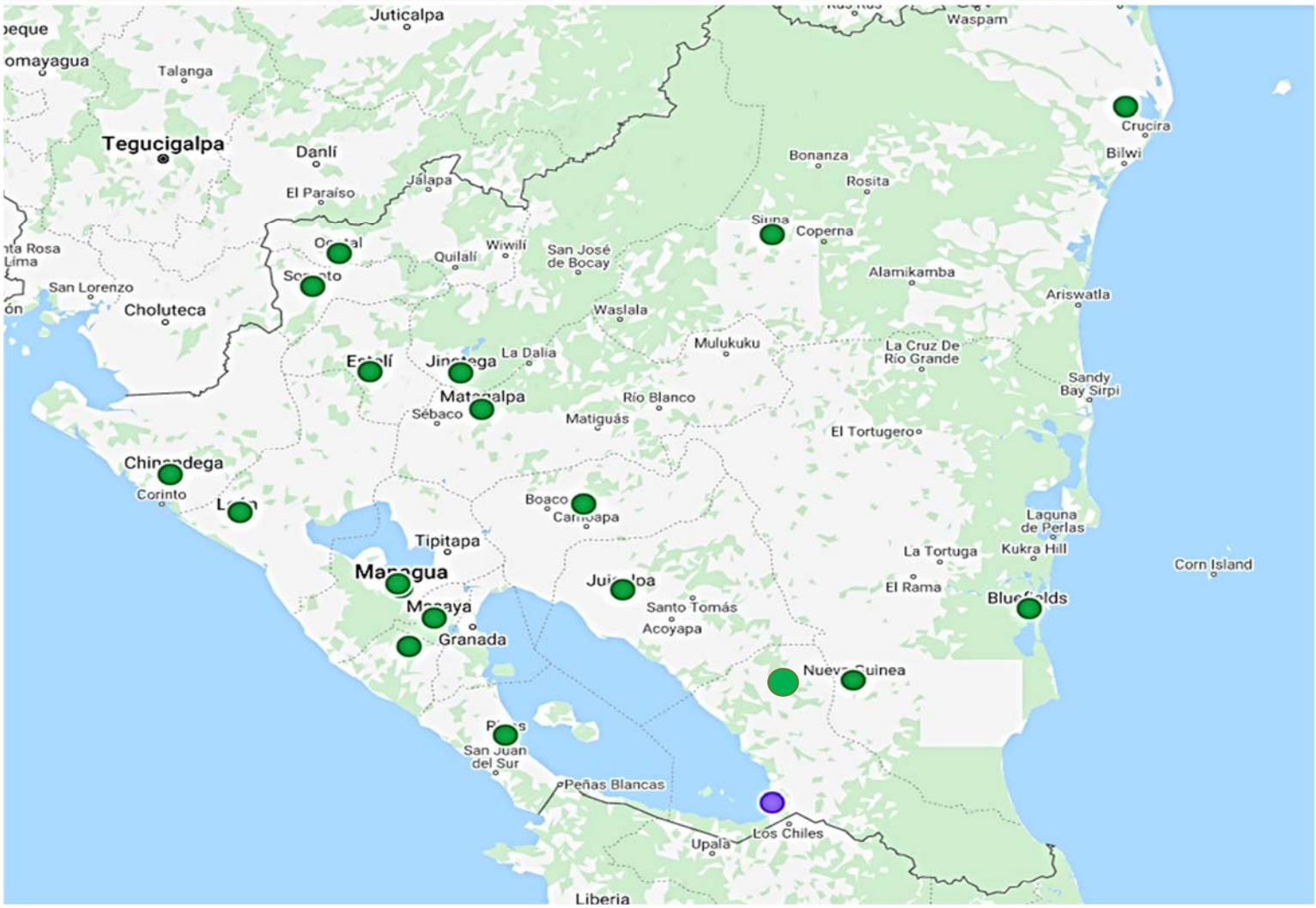


Estimated construction Budget*:
US$ 300,000

SILAIS where they are required:
Managua**
Matagalpa
Chontales.
León.
Estelí.

* This may vary in some SILAIS where the costs may be less.
** Managua requires improvements and the rest of SILAIS require new constructions.

CURRENT SITUATION OF THE REMOTE TEMPERATURE MONITORING SYSTEM IN 19 SILAIS



APPROVED SOURCES OF SUPPORT FOR THE COLD CHAIN

N°. of Articles	Acquisitation of Equipment	1	2	3	4	Total
		BM	COVAX	BCIE	UNICEF	
	Description	Quantity of Equipment				
1	Ice lined combo refrigerator with data logger included. TCW2000 AC (PS level)	57		180	110	347
2	60L ice lined refrigerator. VLS 204	64				64
3	Compression type chest freezer. MF114	64				64
4	Compression type chest freezer. 271 Liter MF314				20	20
5	TFW 3000 AC Cold Pack Freezer					0
6	Refrigerated vehicle for the transport of vaccines. 7 tons			6	1	7
7	Refrigerated vehicle for the transport of vaccines. 9 tons			1		1
8	Electronic freeze indicator. Freeze-tag			1,000	1,000	2,000
9	Compression type chest freezer. MF214			176		176
10	Horinzontal ice lined refrigerator with data logger included. TCW3000 AC	25		176	13	214
11	Ice lined horizontal refrigerator with data logger included. TCW4000 AC		28			28
12	Photovoltaic solar cooler (complete system)	12		50	9	71
13	20 liter Thermal Box	100	96	350	100	646
14	Cold packs 0.6 Liters	210		350	100	660
15	2.7 liter thermos for transporting vaccines			1,000	1,000	2,000
16	30-Day Continuous Recording Electronic Thermometers	200		1,000	965	2,165

EQUIPMENT AND COMPONENT NEEDS OF THE COLD CHAIN

Description of Equipment	Inventories	Needs	Aproved	Gap
PS level coolers	1,067	482	482	0
PS level freezers	380	350	64	286
Refrigerators at the municipal level	394	350	176	174
Municipal freezers	223	221	176	45
SILAIS level refrigerators	143	153	66	87
SILAIS level freezers	50	60	20	40
Solar coolers	91	85	71	14
20 liter thermal boxes	807	700	646	54
Cold packs 0.6 L	19,368	17,000	15,840	1160
Vaccine thermos	2533	4000	2000	2000
Remote Temperature Monitoring Devices. ICE 3 BC 141	20	176	176	0
30-day continuous recording electronic thermometers.	1000	3000	2165	835

Note: The new equipment will be used to replace those that have already reached their life span and expand capabilities.

PREMIOS OTORGADOS AL PAI DE NICARAGUA

1. En el año 2012, Nicaragua, junto a cuatro países de las Américas, fuimos premiados por Alianza Mundial para la Introducción de Vacunas (GAVI), por sus logros en inmunización, al haber logrado altas cobertura.

2. En el año 2015, Nicaragua, Silais Matagalpa recibió el Premio de Inmunizaciones de la Organización Panamericana de Salud, OPS, por lograr las metas de vacunación a través del Modelo de Salud Familiar y Comunitario (MOSAFC).

3. En el año 2015, OPS entrega a Nicaragua, Certificación por destacar en la Evaluación de la Gestión Efectiva de Vacunas, al obtener un puntaje en su primera evaluación de 93%.

"You have to come together, not to be together, but to do something together."

THANK YOU