



Experiences in the development of an Electronic System Support for Livestock Management in the Southern Region of Mexico and its contribution for international recognition as TB low prevalence area.

ISPA Salvador Díaz Oliveros
Technical Manager

Subcommittee for the promotion and protection of livestock in
southern Veracruz

120th USAHA meeting, Greensboro North Carolina EUA, Oct 18, 2016.

Veracruz



- Surface: 72,815 km² - 3.7% Mx.

- 1st National Cattle Inventory

- 2 TB zones:

“A zone” – MA – 165
municipalities
1.4 million heads.

“B zone” – NA– 47
municipalities
2.7 million heads.

Background

Official Reports of the TB review to the states of Veracruz, Chiapas and Tabasco (2005 – 2015).

The Strategic Plan of the National Campaign against Bovine Tuberculosis 2008 – 2012. (SAGARPA MX).

The United States - Mexico Joint Strategic Plan for Collaboration on Bovine Tuberculosis 2013-2018.



SAGGA

Sistema de Apoyo a la Gestión Ganadera

(Support System for Livestock Management)

Scope and usefulness of SAGGA system

The United States - Mexico Joint Strategic Plan for Collaboration on Bovine Tuberculosis 2013-2018

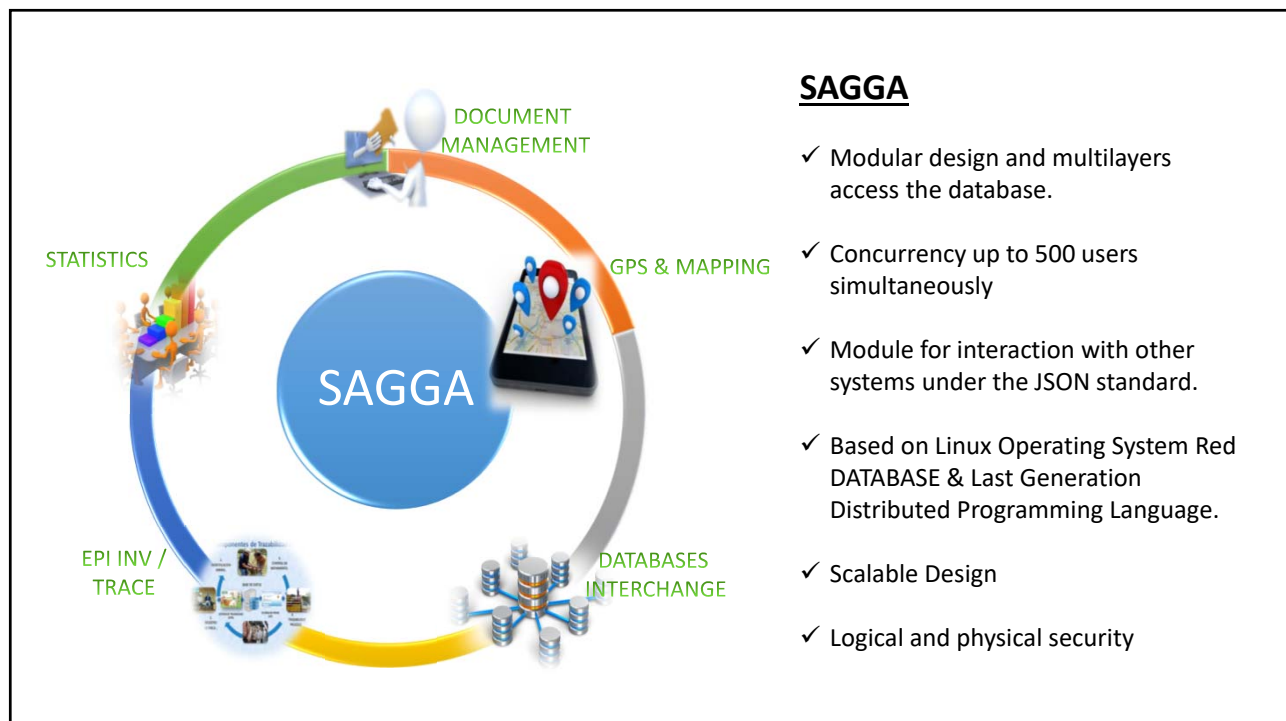
- ✓ **Goal 1: Minimize the risk of TB-affected or exposed animals moving in domestic or international trade.**

- ✓ Objective A: Decrease TB prevalence.
- ✓ Objective B: Improve disease program activities
(Epi Inv, affected herd management, movement controls)
- ◆ Objective C: Improve diagnostic testing
- ✓ Objective D: Improve TB surveillance
- ✓ Objective E: Establish and maintain an effective traceability system

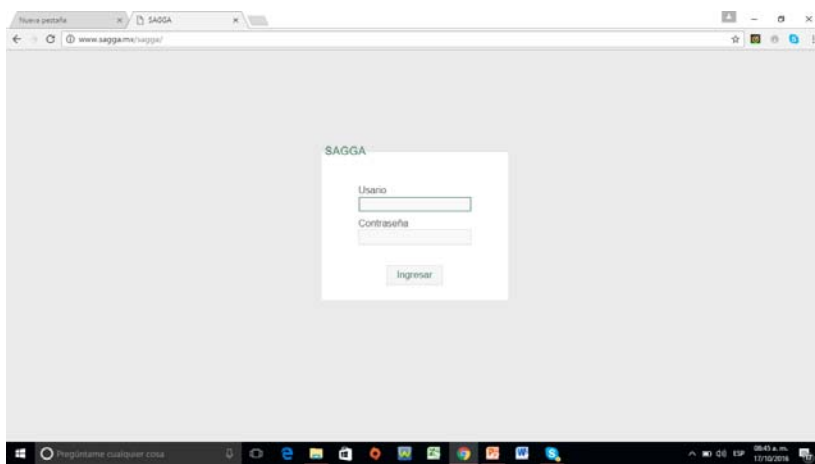
Scope and usefulness of SAGGA system

- ✓ Goal 2: Provide a collaborative framework to define and measure needed improvements in both the Mexican and U.S. TB programs to facilitate trade.

- ✓ Objective A: Ensure transparency and open communications between Mexico and the United States (including process)
- ◆ Objective B: Expedite regulatory changes through streamlined processes
- ✓ Objective C: Harmonize regulatory definitions and actions, where possible.
- ✓ Objective D: Establish an effective training and supervisory component.
- ◆ Objective E: Improve stakeholder communication and participation.
- ✓ Objective F: Ensure State and Committee accountability



USER AUTHENTICATION



ACCESS LEVELS

- ADMINISTRATOR
- EXECUTIVE
- SOP SUPERVISOR
- FIELD OPERATOR
- TYPISTS.
- SPECIFIC TECHNICAL ASSISTANT

- TECHNICAL SUPPORT

HOME SCREEN

SAGGA Veracruz

Trabajando con el Centro Operativo JESUS CARRANZA

MENÚ

- TB & BR Tests >
- Epidemiology >
- Movement >
- Trazability >
- Maps >
- Data Base >
- Statistics >
- Reports >
- Close

SALVADOR DIAZ OLIVEROS

VERACRUZ
GOBIERNO DEL ESTADO

SAGGA
Sistema de Apoyo para la Gestión Ganadera

Pregúntame cualquier cosa

10:27 p.m.
10/10/2016

EPIDEMIOLOGY TOOL

Localidad: Cuauhtémoc. Municipio: JESUS CARRANZA. Estado: Veracruz
 Referencia: CUAUHEMOC
 Productor: XXXXXXXXXX

Prueba	Dictamen
JC13694 Animales: 32	Brucelosis Impresión: 15/02/2016
JC13694 Animales: 32	Tuberculosis Impresión: 15/02/2016
JC608 Animales: 23	Tuberculosis Impresión: 28/02/2015
JC608 Animales: 23	Brucelosis Impresión: 28/02/2015

Google

Datos de mapas © 2016 Google, INEGI Imágenes © 2016 TerraMetrics Términos de uso

S.O.P. by SENASICA

- [EPI INV](#)
- [NON BOVINE SOURCES OF INFECTION INVESTIGATIONS](#)
- [ID MPHQ](#)
- [INFECTED HERD MANAGEMENT PLAN](#)
- [Q. RELEASE](#)
- [OVERSURVEILLANCE](#)

CATTLE MOVEMENT – TRANSIT GUIDE

SAGGA Veracruz Trabaja con el Centro Operativo Todos

Mostrar 50 registros por página

Folio	UPP Origen	UPP Destino	Guia	Animales
294	SINAHU UPP: 300701451002 Localidad: El Corchal. Municipio: HIDALGOTTITLAN. Estado: Veracruz	RASTRO MUNICIPAL HIDALGOTTITLAN UPP: 300700079P03 Localidad: Hidalgotitlan. Municipio: HIDALGOTTITLAN. Estado: Veracruz	Estado: En tránsito Motivo: RASTRO O ABASTO Folio impresión: 1258	Total: 1 CABEZAS Especie: BOVINOS Machos 0 / Hembras 1
293	DOS HERMANAS UPP: 300702192001 Localidad: Las Palomas. Municipio: HIDALGOTTITLAN. Estado: Veracruz	EL CAPRICORNIO UPP: 301001589001 Municipio: MINATITLAN. Estado: Veracruz	Estado: En tránsito Motivo: ENGORDA Folio impresión: 1257	Total: 3 CABEZAS Especie: BOVINOS Machos 3 / Hembras 0
278	SIRENIA UPP: 300702741002 Localidad: El Zapotal. Municipio: HIDALGOTTITLAN. Estado: Veracruz	RASTRO MUNICIPAL HIDALGOTTITLAN UPP: 300700079P03 Localidad: Hidalgotitlan. Municipio: HIDALGOTTITLAN. Estado: Veracruz	Estado: En tránsito Motivo: RASTRO O ABASTO Folio impresión: 1256	Total: 2 CABEZAS Especie: BOVINOS Machos 1 / Hembras 1
245	EL ZAPOTAL UPP: 300701101002 Localidad: El Zapotal. Municipio: HIDALGOTTITLAN. Estado: Veracruz	RASTRO MUNICIPAL HIDALGOTTITLAN UPP: 300700079P03 Localidad: Hidalgotitlan. Municipio: HIDALGOTTITLAN. Estado: Veracruz	Estado: En tránsito Motivo: RASTRO O ABASTO Folio impresión: 1255	Total: 1 CABEZAS Especie: BOVINOS Machos 0 / Hembras 1
243	EL BUFALO UPP: 300700128001 Localidad: El Salto del Matadero. Municipio: HIDALGOTTITLAN. Estado: Veracruz	RASTRO MUNICIPAL HIDALGOTTITLAN UPP: 300700079P03 Localidad: Hidalgotitlan. Municipio: HIDALGOTTITLAN. Estado: Veracruz	Estado: En tránsito Motivo: RASTRO O ABASTO Folio impresión: 1254	Total: 1 CABEZAS Especie: BOVINOS Machos 0 / Hembras 1
55	CORRALES IGASUR UPP: 070170001P01 Localidad: Lázaro Cárdenas. Municipio: CINTALAPA. Estado: Chiapas	TIF 299, CARRETERA VICTORIA MATAMOROS KM 79.5 + 8 UPP: 280180002P01 Localidad: Jiménez (Humberto Salazar Saldivar). Municipio: JIMENEZ. Estado: Tamsulipas	Estado: Entregada Motivo: RASTRO O ABASTO Folio impresión: 1743005	Total: 42 CABEZAS Especie: BOVINOS Machos 42 / Hembras 0

SALVADOR DIAZ OLIVEROS

Pregúntame cualquier cosa

09:09 p. m. 16/10/2016

TRAZABILIDAD & INTERACCIÓN DE BASES DE DATOS

The screenshot displays a web application interface for animal traceability. The main window shows a map of 'LAS CUEVAS' with a location pin. Below the map, there are several data tables and sections:

- Artes Table:** A table listing animals with columns for ID, Name, Sex, Birth Date, Sighting Date, and Status. A blue arrow points from the 'Artes' table to the 'Historial' table.
- Historial Table:** A table showing the history of animals, including Origin, Destination, Date, Folio, and Reason. A blue arrow points from the 'Historial' table to the 'Folios' table.
- Folios Table:** A table showing folio information, including Folio ID, Campaign, Location, and Producer. A blue arrow points from the 'Folios' table to the 'Artes' table.
- Map:** A Google Map showing the location of 'LAS CUEVAS' in the Municipality of La Patateja, State of Veracruz. A blue arrow points from the map to the 'Artes' table.

The interface also includes a sidebar menu with options like 'TB & BSE Tests', 'Epidemiology', 'Movement', 'Trasability', 'Map', 'Data Base', 'Statistics', and 'Reports'. The top navigation bar includes 'Inicio', 'Inicio de Sesión', 'Control Local', 'Inicio de Sesión', 'Administración SAGDA', and 'Redireccionar google'. The bottom navigation bar includes 'Inicio', 'Inicio de Sesión', 'Control Local', 'Inicio de Sesión', 'Administración SAGDA', and 'Redireccionar google'.

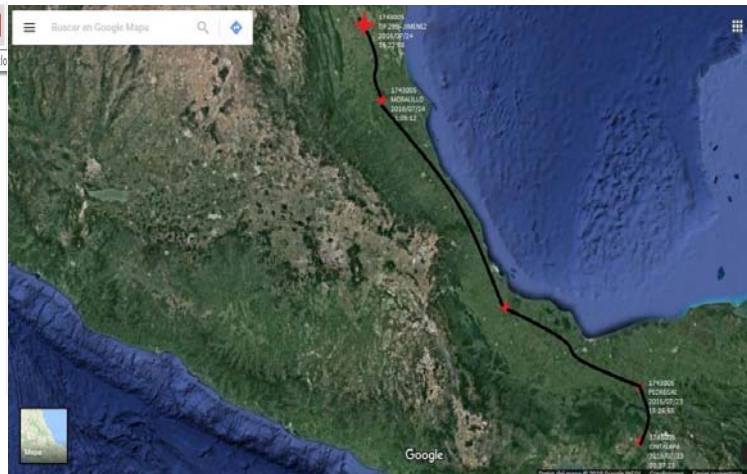
TRAZABILIDAD & CATTLE MOVEMENT INSPECTION

Estado de una guía de tránsito

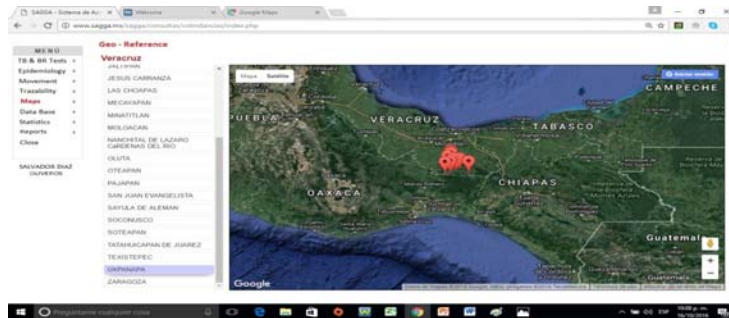
Estado: Entregada

Puntos de verificación

#	Verificación	Comentarios	
1	Pedregal 2016-07-23 15:26:55	pasó el 23/07/16	Cargamento
2	Moravillo 2016-07-24 11:09:12	pasó el 24/07/16	Cargamento
3	TIF299 2016-07-24 15:22:38	pasó el 24/07/16	Cargamento



MAPPING



STATISTICS

The screenshot shows a web application interface for a statistics report. The title is 'Hatos probados por Médico CFT'. The interface includes a navigation menu on the left, search filters at the top, and a data table at the bottom. The data table has columns for 'Médico', 'Motivo', 'No. de eventos', 'No. de pruebas realizadas', 'No. de reacciones', '% de respuesta', and 'CFT'. The data is filtered for 'Varios' as the motive.

Médico	Motivo	No. de eventos	No. de pruebas realizadas	No. de reacciones	% de respuesta	CFT
30-7394-0039	Varios	58	1476	18	1.08	9
30-4528-0082	Varios	38	666	4	0.61	3
30-6738-0174	Varios	414	25465	270	1.04	235
30-6392-0152	Varios	119	3706	65	1.75	27

CONCLUSIONS

- ❖ It allows to carry out a more efficient control of the tasks of field veterinarians
- ❖ SAGGA makes possible to monitor online the TB program performance.
- ❖ It is possible to generate timely and accurate information for better Epi analysis.
- ❖ Oriented tool for tracing cattle associated with the national identification program.
- ❖ It represents an option to establish public policies to strengthen inspection of cattle mobilization, risk control of diseases and statistics.
- ❖ Boost for electronic management of tasks associated with livestock using current computer tools.
- ❖ Tool for verification of animal health programs and identifying reporting information incidents or weaknesses in databases or at field level.



Our thanks to USAHA for the opportunity to present these works.

ISPA Salvador Díaz Oliveros
Technical Manager
Subcommittee for the promotion and protection of livestock in
southern Veracruz

saggaveracruz@gmail.com