CLOSING THE EFFICIENCY GAP

2018 report and outlook

Ernesto Reyes
During 2017-18, the A.N. has continued working together with the A.N. Global Network of Silvopastoral Systems.
Action Network

Closing the Efficiency Gap

Proposal for coordination

Action Network Developments

Action Plan 2019-2021

Brief review

Closing the Efficiency Gap
Efficiency matrix

Criteria for selecting projects

Silvopastoral case studies

Horizontal and vertical assessment

Areas, indicators,

Focus groups

Typical farms

Modeling

Baseline and alternative scenarios

Action Network on Global Network of SPS

Brief review

Proposal for coordination

Project proposals

Evidence

Action Network Closing the Efficiency Gap

Action Plan 2019-2021

Proposal for coordination

Action Network Developments

Closing the Efficiency Gap
Criteria for selecting projects

- Focalization NRUE
- Possibility of Intervention
- Capacity Building
- Regional and Livestock Diversity
- Interaction with AN
- Impact
- Implement. Capacity
- Synergies

SPS case studies

Brief review
Silvopastoral case studies
Action Network on Global Network of SPS

Case 1: BEEF FINISHING
Improvement of degraded natural resources

Case 2: CATTLE BREEDING
Sustainable alternatives for land use

Case 3: FORESTRY + FINISHING
Sustainable diversification for land use

Case 5: CATTLE BREEDING
Sustainable alternatives for land use

Case 7: DAIRY
Scaling of sustainable programs at regional level

Case 8: DAIRY
Scaling of sustainable programs at regional level

Institutions participating in the work of the case studies

Brief review
Silvopastoral case studies
Action Network on Global Network of SPS

**Case 1 – BEEF FINISHING**

**COLOMBIA**

Region: Cesar

Climate condition: Dry tropical

Baseline vs. SPS
From degraded soils to intensive sustainable production

SPS strategy implemented
Intensive SPS
Leucaena + Panicum + Eucalyptus

Sustainability issue to illustrate
Restoring degraded natural resources

Emphasis on SDG

### FORAGE PRODUCTION

Ton. dry matter/ha

700%

compared to baseline

### LAND PRODUCTIVITY

Kg. meat/ha

450%

compared to baseline

### ANIMAL WELFARE

Feeding
Housing
Health
Behaviour

compared to baseline

### Total area: 200 ha.

% Area under SPS

70%

reached: 8th year

### ECONOMIC RESULTS

Initial investment
USD/Ha.

1,850

Profit (USD/year)

### ENVIRONMENTAL IMPACT

Kg CO₂ / 100 kg LW added

Closing the Efficiency Gap
Silvopastoral case studies
Action Network on Global Network of SPS

**Case 7 – DAIRY**

**MEXICO**

Region: Michoacán

Climate condition: Dry subtropical

Baseline vs. SPS
From intensive production system with high dependence on external inputs to intensive sustainable production

SPS strategy implemented
Intensive SPS - Leucaena + Guinea

Sustainability issue to illustrate
Scaling up Intensive sustainable production

Emphasis on SDG

**FORAGE PRODUCTION**
Ton. dry matter/ha

181% compared to baseline

**LAND PRODUCTIVITY**
Tons ECMilk/ha

290% compared to baseline

**Total area:** 50 ha.

% Area under SPS
100% reached: 5th year

**ECONOMIC RESULTS**
Initial investment
USD/Ha.

1,274

Profit (USD/year)

**ENVIRONMENTAL IMPACT**
Kg CO₂ / 100 kg ECM

Base line

SPS

- Feed
- Manure NEX
- Manure methane
- Enteric fermentation
Silvopastoral case studies
Action Network on Global Network of SPS

**Case 9 – FORESTRY + FINISHING**

**ARGENTINA**

Region: Misiones

Climate condition: Humid subtropical

Baseline vs. SPS
From monoculture land use (forestry) to diversified land use

SPS strategy implemented
Hybrid Pine + Axonopus grass

Sustainability issue to illustrate
Sustainable diversification for land use

Brief review

**FORAGE PRODUCTION**
Ton. dry matter/ha

750%
compared to baseline

**LAND PRODUCTIVITY**
Kg LW/ha

9150%
compared to baseline

**Total area**: 240 ha.

% Area under SPS
100%
reached: 16th year

**FORAGE PRODUCTION**
Kg LW/ha

9150%
compared to baseline

**LAND PRODUCTIVITY**
Kg LW/ha

9150%
compared to baseline

**ECONOMIC RESULTS**

Initial investment
USD/Ha.

1,029

**ENVIRONMENTAL IMPACT**
Kg CO₂ / 100 kg LW added

**Profit (USD/year)**
Closing the Efficiency Gap

Brief review
Dialogue facilitation

Promoting and communicating that there are Sustainable Livestock Production Systems that contribute to Sustainable Food Systems

Provide a list showing SLPS

Prepare communication strategy (PPT, Leaflets, forums participation, etc.)

Develop a protocol for approaching SLPS (Improved version of Efficiency Matrix, baseline versus scenarios)

Sustainable options in the portfolio for different scales and systems and their possibilities to reduce emissions in the NAMAs (potential).

Academic cluster (endorsement)
Governments cluster (informed and internalised and regional promoted). Private sector cluster (promotion, adoption and funding)

Providing evidence

Identifying SLPS evidence as a crucial element of SFS

Local and regional identification, internal discussion to endorse programs (projects, evidence), implementing case studies, measuring results

Identification of models and tools for measuring performance in different sustainability facets; endorsement of these models and tools

Recompilation and validation of tools and models for measuring sustainable performance of SLPS, social, economic and environmental performance.

Defining what each model is good for: for ex. GLEAM for Macro. Include scaling up for cases and for models

Standardization of performance measurements

Support practice and policy change

Calculate potential change of mitigation at regional levels throughout SLPS
Identified model, tools, frameworks for showing continuous progress

Revision of models, tools and frameworks for calculating potential change

Strengthening government cluster
Taylor-made information sessions for governments and other key clusters about the evidence regarding SLPS
WHAT IS NEXT?

- More evidence (continue providing evidence) (SLOs)
- Create a portfolio of options (by regions, by topics)
- Support, endorse Modelling (models, methodologies, tools)
- Project proposals?
Several Institutions will continue working providing evidence (scaling Up case studies)

New regions and institutions will participate on these case studies (EMBRAPA, Brazil in Campo Grande/ Maranho State Paraguay and Argentina)

Tools and models for assessing SLOs will continue Under development
The AN agreed to work on its latest action plan (2016-18).

Then, a set of institutions agreed to support the implementation of the working plan under the assumption that GASL was also going to provide financial support.

Due to lack of resources (informed by GASL - AST) GASL recommended to make co-finance schemes for some of the activities stated in the Action Plan.

The AN presented a co-finance proposal jointly with the Global Network of SPS (GNSPS) for implementing case studies on SPS. The proposal was approved and the case studies were implemented.
The AN, together with the GNSPS achieved the following results under co-finance schemes:

a. Efficiency Matrix (guidelines) document
b. A criteria list for adopting NRUE projects
c. 10 SPS case studies
d. One GASL’s publication

Due to lack of resources (informed to the G.G.) both Actions Networks agreed to merge activities (be focused only in SPS case studies and to share coordination (The AN was coordinated by Ernesto Reyes and Lesley Mitchel). L. Mitchel was opening a new AN (Animal Welfare) and recently left GASL.

In the last G.G. meeting (Mongolia) Ernesto Reyes presented its resignation to continue chairing the AN due to overlapping with other GASL’ activities. It was agreed to find options for continuing with the AN.
1. Merging activities with other Action Networks (GlobalNetwork of SPS / LEAP)

2. Conforming a temporal task Force group (TFG) for coordinating the AN. As a proposal, this Task Force could be composed by GASL’ clusters representatives.
Thanks