GNSPS Objectives

Promote the strengthening and scaling up of SPS, wherever there are technical, economic, environmental, and cultural options for supporting livelihoods and business activities with sustainable livestock farming, specifically through the generation, exchange and dissemination of knowledge, the documentation of public policies in countries and/or sub-regions, and the facilitation of dialogue to address the challenges associated with Sustainable Development Goals.
GNSPS Objectives

• Identify the relevant stakeholders and initiatives in silvopastoral systems at global level and the areas where there are demands for knowledge, advice or information about silvopastoral processes.

• Serve as a neutral forum to facilitate the exchange between strategic stakeholders in the silvopastoral field including lead producers, private companies, public policy makers, scientists and communicators to stimulate the local practice change in silvopastoral systems.

• Serve as a multi-stakeholder platform to find consensus in the methodologies of evaluation, transfer of information and development of policies to promote the scaling up of silvopastoral systems.
NETWORK MEMBERS - 2015

- 63 members
- 39 Institutions
- 15 Countries
NETWORK MEMBERS – 2016

- 131 members
- 28 Countries
Main Activities

- 150 members
- 35 Countries
Main Activities

2. Facilitate the exchange of information

- Venezuela: 3 participants
- USA: 2 participants
- Uruguay: 9 participants
- United Kingdom: 1 participant
- Portugal: 2 participants
- Peru: 7 participants
- Paraguay: 13 participants
- Panama: 6 participants
- Mexico: 1 participant
- Honduras: 2 participants
- Guatemala: 3 participants
- Spain: 6 participants
- Cuba: 4 participants
- Costa Rica: 11 participants
- Brazil: 17 participants
- Australia: 53 participants
- Argentina: 33 participants

Total participants: 526
Main Activities

2. Facilitate the exchange of information

International Leucaena Conference

29 October – 2 November 2018
Lombok Island - Indonesia

www.leucaenaconference2018.org/
Main Activities

2. Facilitate the exchange of information

• Book on Silvopastoral Case Studies, 2018.
• X International Congress. 2019, Paraguay.
• II World Congress on Silvopastoral Systems, Argentina, 2020.
Main Activities

3. Provide evidence of sustainability

- Enhanced habitat and food resources for birds, mammals, and invertebrates
- Increase soil quality, water and carbon retention
- Improved soil protection from sun, wind and water
- Increase animal welfare
- Erosion control
- Regulation of water cycle
- Increment animal production with lower methane emissions
- Greater quality and quantity of feed source delivered in situ
- Recover nutrients and water from deeper soil layers
- Various species of grass, shrubs and trees
- Increase biomass production
- Increase biodegradable material
- Increase tolerance to drought
- Silvopastoral System
Main Activities

3. Provide evidence of sustainability

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
3. Provide evidence of sustainability

- 3100 farmers
- 14,500 has of forests preserved
- 14,097 has of SPS
- 2,349 km of live fences
- 1.3 M t of CO2 equiv Fixed
Main Activities

3. Provide evidence of sustainability

Plant Diversity in SPS
81 species

<table>
<thead>
<tr>
<th>Mature forest</th>
<th>Secondary forest</th>
<th>Scattered trees</th>
<th>Agroforestry</th>
<th>Living fences</th>
<th>Intensive SPS</th>
<th>Treeless pastures</th>
<th>Degraded pastures</th>
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</thead>
<tbody>
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<td></td>
<td></td>
<td>73</td>
<td>81</td>
<td></td>
</tr>
</tbody>
</table>
Main Activities

Dung Beetles
15 species

3. Provide evidence of sustainability

- Dung beetles: 15 species
- Cantho spp.
- Canthion spp.
- Canthion sp. 04H
- Canthicola sp.
- Inocelli spp.
- Dichotomius agenor
- Diabroctis cadmus
- Canthon lituratus
- Canthon mutabilis
- Canthon yorksoni
- Phoropus hemer
- Enysternus annectens
- Ophioglyptus genisus
- Dichotomius koebele
- Canthion cf.

Activity areas:
- Mature forest
- Secondary forest
- Scattered trees
- Agroforestry
- Living fences
- Intensive SPS
- Treeless pastures
- Degraded pastures
Main Activities

3. Provide evidence of sustainability

Bird diversity
106 species

Global Network on Silvopastoral Systems
Julián Chará
Main Activities

\[ y = 0.1458x + 42.183 \quad R^2 = 0.9144 \]

\[ y = -0.1407x + 28.295 \quad R^2 = 0.9724 \]

<table>
<thead>
<tr>
<th>Item, % or g/kg</th>
<th>Leucaena + Panicum/star grass</th>
<th>Tithonia + C. clandestinus</th>
<th>Tithonia + Brachiaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Leucaena Inclusion</td>
<td>0.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
<tr>
<td>SSPi PM SSPi PM SSPi PM</td>
<td>0.00</td>
<td>5.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Map: Leucaena, Panicum, Tithonia, C. clandestinus, Brachiaria, fine roots, main roots.
Main Activities

NS-225 - Sustainable Bovine Livestock

Colombia

NAMA Seeking Support for Preparation

<table>
<thead>
<tr>
<th>A Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1 Party</td>
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<tr>
<td>A.2 Title of Mitigation Action</td>
</tr>
<tr>
<td>A.3 Description of mitigation action</td>
</tr>
</tbody>
</table>

Colombia

Sustainable Bovine Livestock
Future Activities

- Book on Silvopastoral Case Studies, 2018.
- Enhancing the scope of SPS case studies
- Contribution to the NDCs and NAMAs
- Implement and effective platform for information exchange among stakeholders (farmers and technicians, scientists, policy makers).
- Presenting project proposals.
Contribution to COP23 and the GFFA

- Methods and approaches for assessing adaptation, adaptation co-benefits and resilience.
- Improved soil carbon, soil health and soil fertility under grassland.
- Improved livestock management systems.
- To reduce livestock’s greenhouse-gas emissions by making livestock production systems more efficient, while also meeting animal health and animal welfare requirements.
- To promote and support international research collaboration on reducing the intensity of GHG emissions from livestock production systems, including by pasture restoration and soil carbon sequestration.