

# LANDSCAPE APPROACH

## LESSONS LEARNT

Looking back on five years of the  
Learning Agenda on Landscape Innovation



**Solidaridad**

**CHANGE THAT MATTERS**

## DISCLAIMER

This learning report was prepared by Katie Minderhoud, coordinator of the Landscape Innovation Learning Agenda, in collaboration with Solidaridad landscape practitioners Maria Sengelela, Maria Duran, Mario Salas, Conor Dolan, Pamidzai Bota and Nancy Rapando. Editing and design of this publication was supported by Nature<sup>2</sup>Squared. This report does not represent a policy position of Solidaridad, but is intended to share lessons and experiences for consideration by interested stakeholders and to promote ongoing discussion.

## CONTACT

Katie Minderhoud,  
Knowledge Management and  
Learning Advisor at Solidaridad Europe.  
Email: [Katie.Minderhoud@solidaridadnetwork.org](mailto:Katie.Minderhoud@solidaridadnetwork.org)

## AUTHOR

Katie Minderhoud, with contributions from Maria Sengelela, Maria Duran, Mario Salas, Conor Dolan, Pamidzai Bota and Nancy Rapando.

## PRODUCTION

Nature<sup>2</sup>Squared: Daan Groot, Iris Visser, Anastasia Angelovskaya



Nature<sup>2</sup>Squared  
[www.nature-squared.org](http://www.nature-squared.org)  
Amsterdam, The Netherlands

# LANDSCAPE APPROACH

## LESSONS LEARNT

Looking back on five years of the  
Learning Agenda on Landscape Innovation

January, 2021  
Katie Minderhoud

# VOICES FROM THE LANDSCAPE

As landscape practitioners we need to communicate and explain the landscape approach. This starts with meetings with stakeholders to create a shared understanding of what is meant by a landscape and what the programme aims to do. We have to work in close consultation with relevant authorities and engage everyone who has a role to play to improve the ecosystem of the landscape.

**MARIA SENGELELA - COORDINATOR KILIMANJARO LANDSCAPE PROGRAMME, TANZANIA**



The MSP is critical for our work in landscapes because it is the way in which we engage with stakeholders. The Multi-stakeholder Platform provides a platform in which we can engage vulnerable people and create the opportunity to listen to the diversity of needs and issues in the landscape. The next step is to prioritise together. It is a big responsibility to work in such a political and vulnerable space, which requires sensitivity to stakeholder positions and strong facilitation skills.

**MARIO SALAS - COORDINATOR CHACO LANDSCAPE PROGRAMME, PARAGUAY**

In our work we connect landscape leaders. The most important aspect of our approach is to engage different stakeholders within the same platform and motivate them to combine their experiences, resources and to shape solutions together. These personal networks are powerful and drive change in the landscape. People are at the centre of the landscape.

**MARIA DURAN - COORDINATOR PASOS LANDSCAPE PROGRAMME, NICARAGUA**



Governance arrangements for resource management need to fit the local context and match the institutional capacity. Even in one landscape, the composition of two Water User Associations, can turn out very differently depending on the members and agreements between them. We have to keep this in mind when copying and scaling governance models and landscape solutions.

**CONOR DOLAN - WATER GOVERNANCE EXPERT, MAZABUKA LANDSCAPE, ZAMBIA**



To find solutions in the landscape we need constant communication with our partners, because everyone has different assumptions about what to do and what each of us is bringing to the table. We need to clearly show how sustainable agriculture, fisheries, livestock management, and natural resource management are connected and depend on the same ecosystem.

**PAMIDZAI BOTA - COORDINATOR MAZABUKA LANDSCAPE PROGRAMME, ZAMBIA**



Our entry point in the landscape is commodity production. Production landscapes are rich in biodiversity, both on farm and in the surrounding landscape around. Solidaridad is uniquely positioned to support interventions where we balance production, restoration and conservation. Overall, resource management at landscape level is critical for sustainable agriculture and for dealing with challenges such as water governance, equitable access to land and water, and climate risk.

**NANCY RAPANDO - LANDSCAPE & CLIMATE EXPERT, SOLIDARIDAD EAST AFRICA**



Landscape practitioners are the ones building relationships and connections in the landscape. This is a complex process, navigating interests and concerns, which takes time, trust and commitment to realize positive impact together.

**KATIE MINDERHOUD - KNOWLEDGE MANAGER AND LEARNING ADVISOR, SOLIDARIDAD NETWORK**



# TABLE OF CONTENTS

## 1. REPORT AT A GLANCE 8

## 2. INTRODUCTION 10

- 2.1 Landscape programming in Solidaridad 10
- 2.2 Learning agenda Landscape Innovation 10
- 2.3 Purpose & Structure of this Report 11
- 2.4 The Future of Landscape Programming within Solidaridad 12
  - Text-box 1: Reclaiming Sustainability 14

## 3. THE LANDSCAPE APPROACH 16

- 3.1 Definition and relevance 17
- 3.2 Five Building Blocks 18
  - Text-box 2: When Does Solidaridad Turn to a Landscape Approach 19
  - 10 Principles of the Landscape Approach 22

## 4. LESSONS FROM THE LANDSCAPE 24

- Landscape Programmes from around the World 26
- Our lessons 28
- 4.1 MSPs for collective action 30
  - 4.1.1 Building Trust (Paraguay) 34
  - 4.1.2 Connecting Policy with Practice (Tanzania) 36
  - 4.1.3 Collaborative Action (Zambia) 38
- 4.2 Knowledge about the landscape 40
  - 4.2.1 Information Systems for NRM (Zambia) 44
  - 4.2.2 Monitoring Climate Smart Practices (Paraguay) 46
  - 4.2.3 Scenario modelling for Landscape Solutions (Honduras) 48
- 4.3 Business in Landscapes 50
  - Text-box 3: New Perspectives on the Role of Business in Landscape 54
  - 4.3.1 New Markets for Local Needs (Paraguay) 56
  - 4.3.2 Supply Chain Connections & Market Information (Zambia) 58
  - 4.3.3 Incentives for Working with Nature (Nicaragua) 60
- 4.4 Landscape Governance 62
  - 7 Barriers for Effective Rules and Policies 66
  - 4.4.1 Participation Empowers Policies (Tanzania) 68
  - 4.4.2 Institutional Capacity & Policy Gaps (Zambia) 70
  - 4.4.3 Zero-deforestation Commitment (Honduras) 72
- 4.5 Landscape Finance 74
  - 4.5.1 Access to Finance (Paraguay) 78
  - 4.5.2 Enabling Finance 80
  - 4.5.3 Landscape Investment 82
- Organisational Learnings: 9 Lessons to Take Forward 84
- Text-box 4: Organisational Challenge: How to go about Landscape Monitoring? 88

## 5. IN CONCLUSION 90

- 5.1 Learning together 90
- 5.2 Moving forward 90
- 5.3 Future Outlook 91
- 5.4 Celebrating Teamwork in a Learning Organisation 91

## BIBLIOGRAPHY 92

## ANNEX 1: LANDSCAPE TOOLBOX 93



# 1

## REPORT AT A GLANCE

HOW TO READ THIS REPORT.

**7**  
LANDSCAPE PROGRAMMES

**15**  
KEY LESSONS

**5**  
BUILDING BLOCKS

This report aims to familiarize you with the landscape approach and, in particular, Solidaridad's Learning Agenda on Landscape Innovation. We invite you to read the full report, or to jump to one of these chapters.

With a landscape approach we seek to understand interdependencies in ecological systems and seek to create incentives and overcome barriers in support of sustainable production and access to markets for healthy food systems, while bringing together a diversity of voices and perspectives to understand local needs and interests.

**DISCOVER THE LANDSCAPE APPROACH ON PAGE 16**



The theoretical foundation of the landscape approach can be summarized by 10 principles which guide design and implementation.

**GET FAMILIAR WITH THE 10 PRINCIPLES OF THE LANDSCAPE APPROACH PAGE 22**

### THE 5 BUILDING BLOCKS OF THE LANDSCAPE INNOVATION LEARNING AGENDA

	<b>MULTI-STAKEHOLDER APPROACHES</b>	How does a multi-stakeholder process contribute to the overarching goal of sustainable and inclusive landscapes?	<b>READ MORE ON PAGE 30</b>
	<b>LANDSCAPE KNOWLEDGE</b>	Developing landscape knowledge is key to design solutions that work in practice. Knowledge development is a constant process, how do you start?	<b>READ MORE ON PAGE 40</b>
	<b>BUSINESS IN LANDSCAPES</b>	The private sector can play a pivotal role in realizing sustainable landscape management. Why should businesses get involved?	<b>READ MORE ON PAGE 50</b>
	<b>LANDSCAPE GOVERNANCE</b>	Shaping effective governance starts with understanding the local context. How can we overcome barriers to promote effective governance?	<b>READ MORE ON PAGE 62</b>
	<b>LANDSCAPE FINANCE</b>	Understanding financial flows within a landscape is vital to direct money to where it matters. What factors contribute to making finance work for landscapes?	<b>READ MORE ON PAGE 74</b>



Through sharing their experiences in the field, our landscape practitioners bring together 15 lessons for the application of the landscape approach.

**FIND THEM ALL ON PAGE 28**



Five years of landscape work has taught us a lot. Lessons from the landscapes also generated organizational learnings.

**FIND OUT WHAT WE LEARNED ON PAGE 84**

Solidaridad is moving forward with a new Multi-Annual Strategic Plan: Reclaiming Sustainability.

**READ MORE ON PAGE 14**



# 2

## INTRODUCTION



### 2.1 LANDSCAPE PROGRAMMING IN SOLIDARIDAD

The Landscape Approach was embraced as an innovation theme during the 2016-2020 Multi-Annual Strategic Plan (MASP). Seven new landscape programmes were designed under a shared Theory of Change as part of the Advocacy for Change funding (AfC) from the Dutch Ministry of Foreign Affairs. Solidaridad entered into a new way of working: expanding our horizon beyond the farm gate of producers, beyond supply chain partnerships and beyond a commodity focus by taking a landscape approach.

### 2.2 LEARNING AGENDA LANDSCAPE INNOVATION

At network level, Solidaridad committed to an internal Learning Agenda on the topic of Landscape Innovation to support the implementation of landscape programming across regional expertise centres (RECs). The aim was to enhance learning by sharing experiences during implementation and to enable uptake of lessons learnt in the wider organization for future programming.

**THE LANDSCAPE APPROACH IS THE OPERATIONAL SCALE TO GRASP CONNECTIONS BETWEEN HUMAN ACTIVITIES AND THE EFFECTS ON OUR ENVIRONMENT. GLOBAL GOALS NEED TO BE UNDERSTOOD IN LOCAL REALITY. AT LANDSCAPE LEVEL, PEOPLE CAN MAKE THEIR OWN VALUES EXPLICIT AND DISCUSS THE PRECONDITIONS FOR CHANGE AND CONSEQUENCES OF INACTION.**

### 2.3 PURPOSE AND STRUCTURE OF THIS REPORT

This report guides you through the Solidaridad learning journey in Landscape Programming. In this report you will find lessons learnt, structured around the building blocks for the Solidaridad landscape approach. These lessons are based on programme implementation, learning agenda activities and insights generated and shared by landscape practitioners between 2017 and 2020.

Resources and evidence referenced consist of internal reporting, documentation of learning activities and team meetings, as well as direct engagement with colleagues through focus group conversations and interviews. In addition, external resources, such as scientific literature as well as tools and guidelines from other organisations, are brought in to contextualise learnings within existing knowledge and latest insights on the landscape approach.

Section 2 explains the relevance and value of taking a landscape approach. Section 3 presents the five building blocks for Solidaridad landscape programming and the ten principles commonly used to clarify essential elements of landscape programming. Section 4 presents lessons for each of the building blocks, using case examples to provide context and background. Building on the landscape specific lessons from the case examples, Section 5 formulates lessons and recommendations for uptake

The focus of the learning agenda has been on:

- 1 Tool development – testing existing, and developing new, tools relevant for design, implementation and monitoring of landscape programming;
- 2 Exploring and validating the Solidaridad proposition and Theory of Change in landscape programming;
- 3 Capacity building of staff to support design, implementation and monitoring of landscape programming.

in the organisation. Section 6 shares some final words in conclusion of this learning report, most importantly celebrating the landscape practitioners who made this work a reality in the landscapes across the globe.

## 2.4 THE FUTURE OF LANDSCAPE PROGRAMMING WITHIN SOLIDARIDAD

The start of 2021 marks the beginning of a new five year strategy for Solidaridad, titled “Reclaiming Sustainability 2021 - 2025”.<sup>1</sup> This strategy builds on lessons from the past and will guide our work across the global network with clear priorities for the future. The value of taking a landscape approach and the experience gained through landscape programming is recognised and taken forward in the new strategy in three ways.

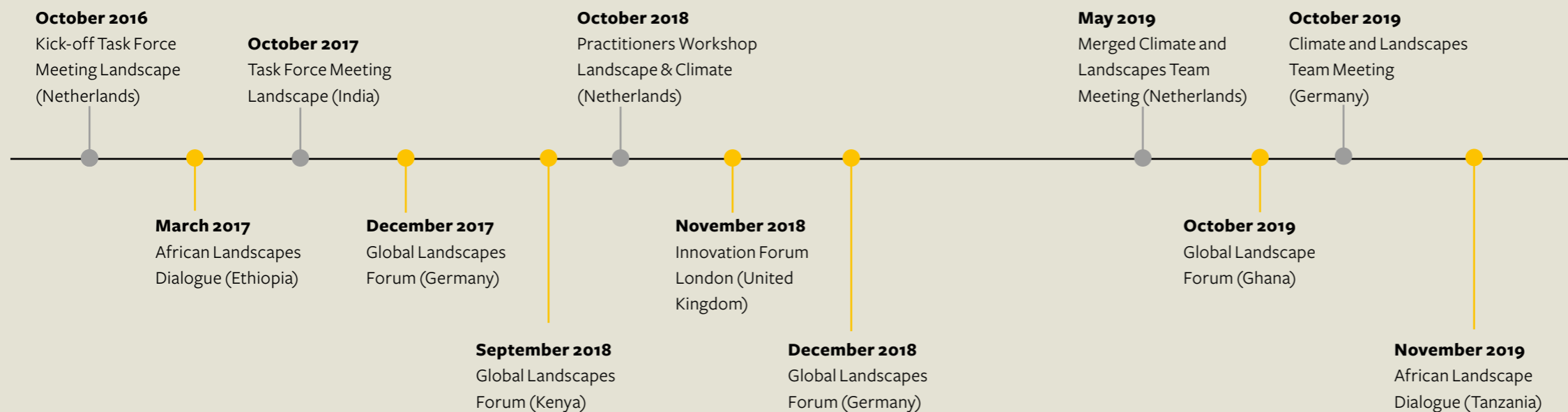
First, understanding sustainability challenges at landscape scale and mobilising landscape stakeholders are key interventions at landscape level. This landscape level perspective will continue to be part of Solidaridad’s comprehensive approach of driving change towards sustainability at five different levels.

Secondly, the new strategy highlights the role of local urban markets in future landscape programming with increased attention for local economic development and resilient food systems. The aim is to use the rural-urban connection as a catalyst for change, where producers deliver high-quality and healthy food to conscious consumers who are willing to pay a fair price and remunerate environmental stewardship in the landscape. Local markets first and foremost have to meet growing demands in quantity and quality of food and nutrition. In addition, local markets also allow for innovation in value addition, circularity and delivery models, which offer new job opportunities in the food economy.

Lastly, and most importantly, the agenda laid out for Reclaiming Sustainability (see text-box 1 on Reclaiming Sustainability on page 14) is based on three guiding principles: balance with nature, prosperity and inclusivity. These principles are key to the overarching ambition to contextualise sustainability challenges and solutions by empowering and enabling stakeholders to take action. This is an agenda of claiming rights, taking responsibility, and jointly designing accountability mechanisms so people can prosper while taking care of the environment and nature.



### TIME-LINE LEARNING JOURNEY



The learning agenda for Landscape Innovation facilitated an internal learning journey for Solidaridad landscape practitioners. Internal activities centred around team meetings, field visits, training courses, tool development and peer group discussions for reflection and exchange. External activities included participation and co-organising learning events such as the Global Landscape Forum and the African Landscape Dialogue, in close collaboration with knowledge partners such as Landscape for People Food and Nature and Platform NLandscapes.

**TEXT-BOX 1:  
RECLAIMING SUSTAINABILITY  
2021-2025 MULTI-ANNUAL STRATEGIC PLAN**

**WORKING ON FIVE DIFFERENT LEVELS**

“Working only at farm or mine level rarely leads to the systemic change we hope to see. The whole environment around the producer requires transformation. We will therefore continue to work on five levels to achieve maximum impact: at producer level, at infrastructural level (the business ecosystem), at landscape level, at country level, and at market level. Through comprehensive integration of these levels we have been able to accelerate inclusive and sustainable development.”

**INCLUDE LOCAL URBAN MARKETS**

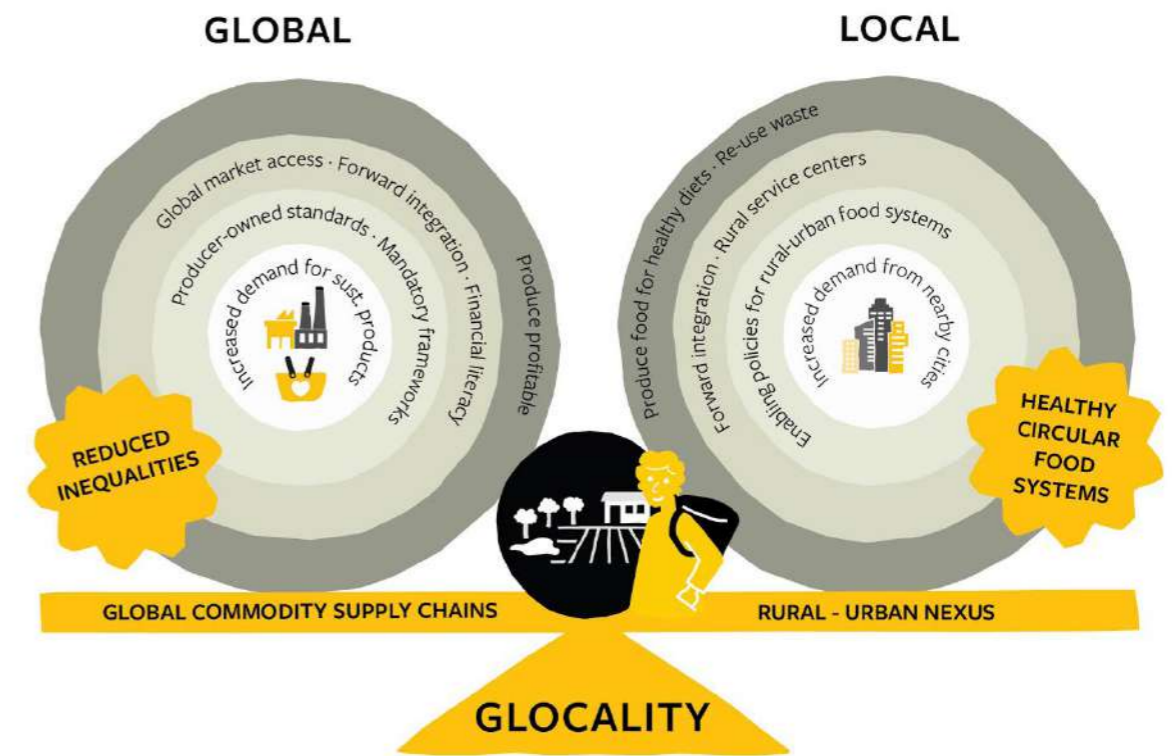
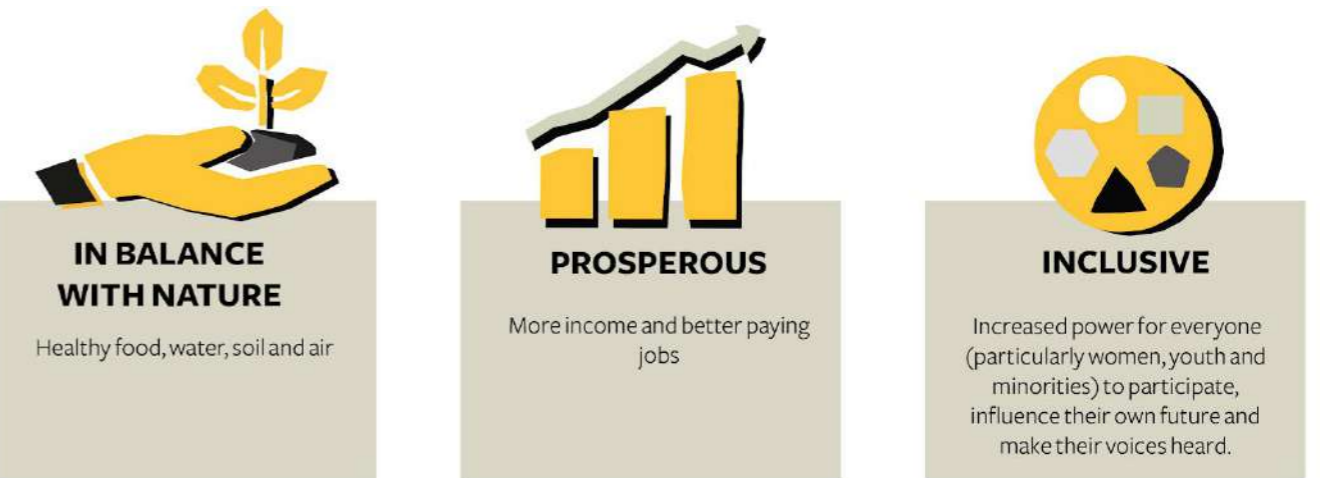
“Our attempts to address ecological issues beyond supply chains through landscape programming has delivered scattered results due to insufficient focus on supply chains and market uptake. In Reclaiming Sustainability 2021-2025, we will connect the necessary multi-stakeholder initiatives in production landscapes to concrete market demand. Urbanisation and changing urban consumption patterns will drive the change. The most important landscapes for Solidaridad will be peri-urban, where multi-stakeholder collaboration can spark a shift towards fundamentally different, circular food systems that generate healthier and resource efficient outcomes while offering new and more profitable local markets for farmers.”

**CONTEXTUALISING SUSTAINABILITY**

While sustainability challenges are global in nature, such as climate change, biodiversity loss, deforestation and ecosystem degradation, the capacity to address these challenges is rooted in local action. Landscape level initiatives provide an operational scale to mobilise stakeholders, understand issues and needs, and jointly contextualise the meaning of sustainability based on indigenous values. While global policy guidance and private sector standards can inform and support shaping responsible governance and sustainable production, local ownership and stakeholder collaboration are essential drivers for change. The landscape approach enables coordination of stakeholders to define sustainability in the context of place and consciously balancing multiple landscape functions and stakeholder needs.

*Text in italic derived from “Reclaiming Sustainability: Solidaridad’s strategy for the years ahead”.*

**RECLAIMING SUSTAINABILITY  
CREATING AN ECONOMY THAT WORKS FOR ALL**



**THE CONCEPT OF GLOCALITY EXPLAINED**

We need a new economy. An economy that works for all, with a better balance between local economic development and globalisation. This better balance — which we refer to as glocality — will require increased and renewed ownership of sustainability by farmers and workers.



# 3

## THE LANDSCAPE APPROACH

### 3.1 DEFINITION AND RELEVANCE

Within Solidaridad, the landscape approach is a way of working to deliver impact, that is strongly embedded in the institutional context of a landscape to ensure a participatory and inclusive change process towards sustainable and equitable development. Since the landscape approach is seen as a delivery model for the strategy beyond 2020, it is important for staff of Solidaridad Network to become familiar with what a “landscape” is and what a landscape approach entails.

With a landscape approach we seek to understand interdependencies in ecological systems and seek to create incentives and overcome barriers in support of sustainable production and access to market for

healthy food systems while bringing in a diversity of voices and perspectives to understand local needs and interests.

#### WHAT IS A LANDSCAPE?

A landscape is a geographical area (a place), consisting of physical features as well as the social, economic and natural functions. It is shaped by ecological, political, economic and cultural processes, both historic and present.<sup>2</sup>

#### WHAT IS A LANDSCAPE APPROACH?

A landscape approach is about considering these multiple interconnected functions, practices and governance processes in decision-making, often through some form of coordination between stakeholders.<sup>3</sup>

## BRIEF THEORETICAL BACKGROUND CLARIFYING CONCEPTS AND DEFINITIONS

This chapter provides a brief introduction to the theory behind the landscape approach. Basic concepts are explained and definitions are provided to build a shared language on the topic. The five building blocks for Solidaridad landscape programming are presented, which also structure the documentation of lessons in this report. The *Ten Principles of the Landscape Approach* are shared as a leading external reference document to grasp the essence of the approach.

### THE LANDSCAPE APPROACH IS:



A way of looking at your environment.



A way of working in partnership across sectoral boundaries.



A way of thinking in connected and integrated systems.



A process of learning and adaptive management.

### OUR ENTRY POINT IN A LANDSCAPE

Historically, Solidaridad has a track record working in partnership with private sector actors. Either through direct cooperation in the supply chains or by forming sector level initiatives, Solidaridad has played a role in driving the agenda for sustainable practices in major commodity sectors. The landscape approach takes the sustainability agenda to a next level, while building on the foundation of supply chain partnerships and sectoral development strategies but now explicitly taking into account the multi-functionality of the landscape – including multiple actors, sectors, interests and needs.

### 3.2 FIVE BUILDING BLOCKS

Based on the original Theory of Change which forms the backbone of the landscape programmes, key interventions and topics were selected which resulted in the following five building blocks: Multi-stakeholder Platform, Landscape knowledge, Business in Landscapes, Landscape governance and Landscape finance. These topics were used to systematically support programme implementation with relevant tools and consolidate the learnings. It is important to note that these building blocks can also provide relevant insights beyond the scope of landscape programming, since they touch on generic interventions such as capacity building, private sector partnerships and enabling policy environment. Below, each building block is briefly introduced.

#### MULTI-STAKEHOLDER PLATFORM

##### WE CONNECT STAKEHOLDERS AND CREATE A SPACE FOR DIALOGUE AND PLANNING

We bring together stakeholders in multi-stakeholder partnerships and platforms to enable alignment and cooperation. “We see MSPs as a form of governance (...), a way in which groups of people can make decisions and take action for the collective good, be it at local, national, or international scale. (...) where stakeholders can learn together in an interactive way, where people can speak and be heard, and where everybody’s ideas can be harnessed to drive innovation and find ways forward that are more likely to be in the interests of all”.<sup>4</sup>

#### LANDSCAPE KNOWLEDGE

##### WE POOL INFORMATION AND BUILD A COLLECTIVE BODY OF LANDSCAPE KNOWLEDGE

Bringing together a variety of stakeholders ensures access to the diversity of their knowledge. We thus gather and share information to build a collective body of landscape knowledge in partnership with local and international research institutions. This shared knowledge base is a critical foundation for analysis, decision making, action, monitoring and communication.

#### BUSINESS IN LANDSCAPES

##### WE DEVELOP AND TEST VIABLE BUSINESS MODELS WHICH WORK FOR PEOPLE AND FIT THE LANDSCAPE

Identified solutions need to be actionable, affordable and have to make business sense. We work with farmers, entrepreneurs, cooperatives, and downstream supply chain actors to ensure a direct market link. Moreover, together we align goals on production practices and product requirements, set up necessary service provisions for producers and solve bottlenecks in supply chain infrastructure. We seek to develop business models that generate a viable income, support investment in improved practices, and contribute to protection and restoration of natural resources.

#### EFFECTIVE GOVERNANCE

##### WE BRIDGE THE GAP BETWEEN POLICY AND PRACTICE, CONTRIBUTING TO LANDSCAPE GOVERNANCE

Landscape governance is the set of rules (policies and cultural norms) and decision-making processes of public, private and civil society actors that shape the landscape. There are many ways in which landscape governance can fall short. Policies are either not in place, are weak or conflicting, or the public is simply unaware of them. Institutions often lack the capacity, incentives or means to implement and enforce policies. On the one hand, we raise awareness on existing policy frameworks which affect land use planning and resource management. At the same time, we also identify the requirements to improve governance in practice. Solidaridad fulfils a key role through linking community and producer level issues to district and

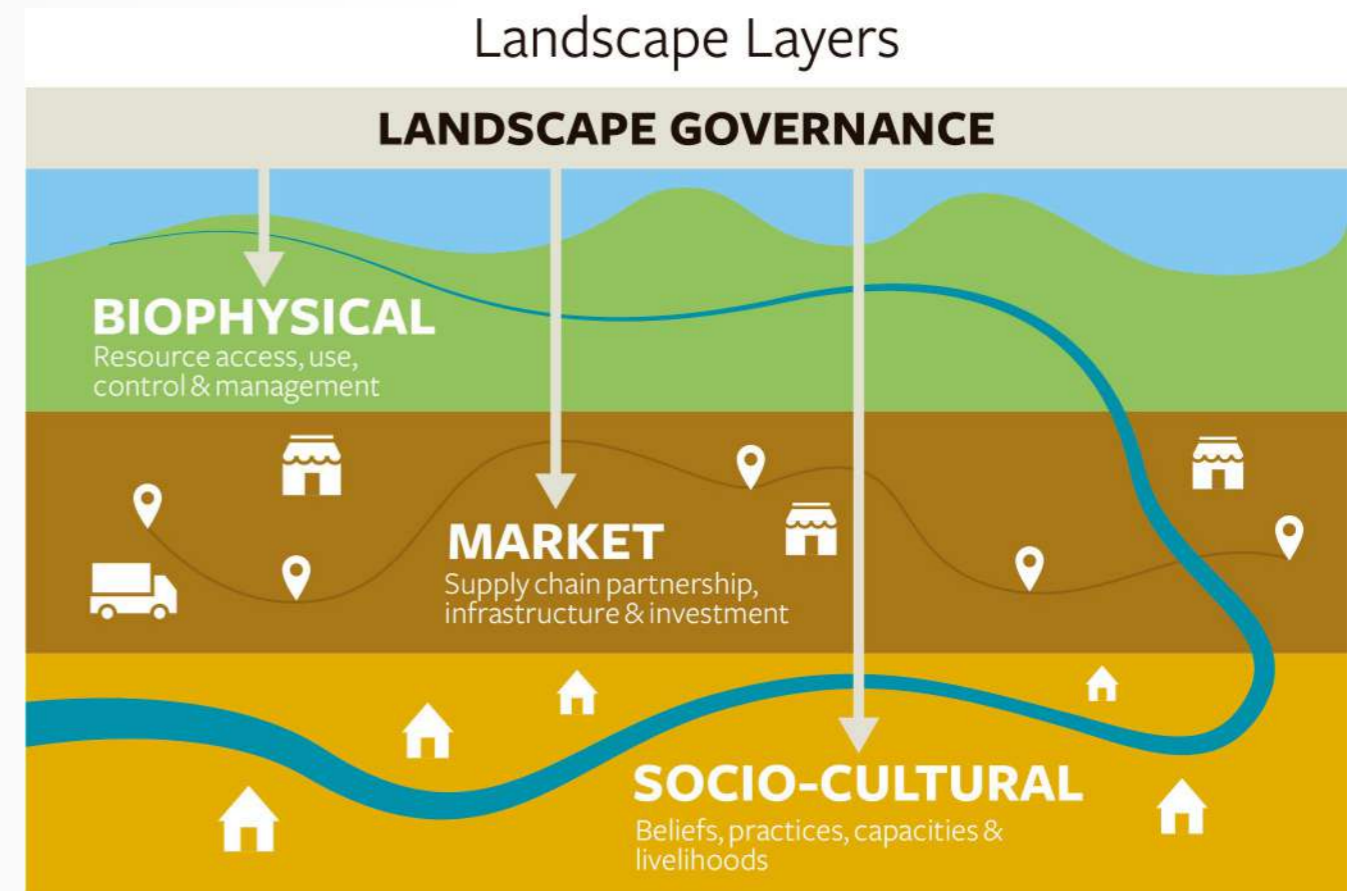


Figure 1: Landscape Layers

This figure visualises the biophysical, economic and socio-cultural domains (or landscape layers) which are present in a geographic area (a landscape). With a landscape approach we aim to understand the multiple interconnected functions, practices and governance processes in decision-making, which cut across these layers. Coordination between stakeholders and coordination of governance across layers is complex but these are critical processes to find equitable solutions that make sense in the specific landscape context.

### TEXT-BOX 2: WHEN DOES SOLIDARIDAD TURN TO A LANDSCAPE APPROACH?

The following criteria guide whether Solidaridad should embrace a landscape approach:

1. There is a common concern entry point; there is a sense of urgency and need for a landscape approach felt by stakeholders within and connected to the landscape.
2. One or more of dominant commodities are present in the landscape; Solidaridad can leverage commodity specific expertise and partnerships. It is a strategy to scale ongoing interventions towards an integrated approach in a larger geography and Solidaridad expands its scope of work towards partnerships at jurisdictional level with local, regional and/or national government to jointly work towards the full range of SDGs in an identified landscape.
3. Solidaridad is in the position to convene stakeholders in the landscape; based on our track record in the country/region Solidaridad is seen as a trusted and neutral partner.

national level planning and policy dialogues.

#### **ENABLING FINANCE**

#### **WE UNLOCK FINANCE FOR SUSTAINABLE LANDSCAPES**

Access to finance or capital investment is often required in order to change practices on the ground. Our goal is to match appropriate financial instruments and institutions with a pipeline of projects in the landscape. Providing access to finance at producer level for replanting and enabling investment in renewable energy at municipal level require different means of financial support. We connect in a timely matter with financial institutions to develop viable business models which match private and public sector needs, with attention for risks and return on investment.



# 10 PRINCIPLES OF THE LANDSCAPE APPROACH



A key external reference document to better understand the landscape approach is “Ten Principles for a landscape approach to reconciling agriculture, conservation, and other competing land uses” by Sayer et al (2013).<sup>5</sup> This publication sheds light on key characteristics and criteria for success, listed in the 10 principles below. These principles have provided guidance and function as a reference point for the Solidaridad landscape learning agenda to reflect on and strive towards.

## **1** CONTINUAL LEARNING AND ADAPTIVE MANAGEMENT

Landscape processes are dynamic. Despite the underlying uncertainties in causes and effects, changes in landscape attributes must inform decision-making. Learning from outcomes can improve management. Adaptive management and, more recently, “adaptive collaborative management” have emerged as practical approaches to this process of continual learning.

## **2** COMMON CONCERN ENTRY POINT

Identifying immediate ways forward through addressing simpler short-term objectives can begin to build trust with stakeholders. Each stakeholder will only join the process if they judge it to be in their interest. Launching the process by focusing on easy-to-reach intermediate targets may provide a basis for stakeholders to begin to work together.

## **3** MULTIPLE SCALES

Numerous system influences and feedback loops affect management outcomes, but these impacts unfold under the influence of a diverse range of external influences and constraints. An awareness of higher and lower level processes can improve local interventions, inform higher-level policy and governance, and help coordinate administrative entities.

## **4** MULTIFUNCTIONALITY

Landscapes and their components have multiple uses and purposes, each of which is valued in different ways by different stakeholders. Trade-offs exist among the differing landscape uses, that need to be reconciled. The landscape approach acknowledges the various trade-offs among these goods and services and addresses them in a spatially explicit and ecosystem-driven manner that reconciles stakeholders’ multiple needs, preferences, and aspirations.

## **5** MULTIPLE STAKEHOLDERS

Multiple stakeholders frame and express objectives in different ways. Failure to engage stakeholders in an equitable manner in decision-making processes will lead to suboptimal, and sometimes unethical, outcomes. All stakeholders should be recognised, even though efficient pursuit of negotiated solutions may involve only a subset of stakeholders.

## **6** NEGOTIATED AND TRANSPARENT CHANGE LOGIC

Transparency is the basis of trust among stakeholders, and is achieved through a mutually understood and negotiated process of change; aided by good governance. All stakeholders need to understand and accept the general logic, legitimacy, and justification for a course of action, and to be aware of the risks and

uncertainties. The effort of building and maintaining such a consensus is a fundamental goal of a landscape approach.

## **7** CLARIFICATION OF RIGHTS AND RESPONSIBILITIES

Rules on resource access and land use shape social and conservation outcomes and need to be understandable to form a basis for good management. Access to a fair justice system allows for conflict resolution and recourse. The rights and responsibilities of different actors need to be clear to, and accepted by, all stakeholders.

## **8** PARTICIPATORY AND USER-FRIENDLY MONITORING

To facilitate shared learning, information needs to be widely accessible. Systems that integrate different kinds of information need to be developed. When stakeholders have agreed on desirable actions and outcomes, they will share an interest in assessing progress. The gathering and interpretation of information is a vital part of developing and updating the “Theories of Change” on which the landscape approach is based.

## **9** SYSTEM-LEVEL RESILIENCE

System-level resilience can be increased through an active recognition of threats and vulnerabilities. Actions that address threats and which allow for recovery after a shock or disaster through improving capacity to resist and respond, need to be promoted. Resilience may not be well understood in every situation, but can be improved through local learning and through drawing lessons from elsewhere.

## **10** STRENGTHENED STAKEHOLDER CAPACITY

People require the ability to participate effectively and to accept various roles and responsibilities. Such participation presupposes certain skills and abilities (social, cultural, financial). The complex and changing nature of landscape processes requires competent and effective representation and institutions that are able to engage with all the issues raised by the process.



# 4

## LESSONS FROM THE LANDSCAPE

### FROM THEORY TO PRACTICE

Within Solidaridad, the landscape approach is a way of working to deliver impact, that is strongly embedded in the institutional context of a geography to ensure a participatory and inclusive change process towards sustainable and equitable development. The landscape approach is seen as a delivery model for the Solidaridad strategy and has been piloted in seven landscape programmes around the world, where practitioners have faced new challenges and learnt valuable lessons from applying the landscape approach in practice.

This chapter presents lessons learnt from the landscape programmes structured around the five building blocks for landscape programming: Multi-stakeholder Platform, Landscape Knowledge, Business in Landscapes, Landscape Governance and Landscape Finance. Each building block is first introduced and then three case examples follow to elaborate on the experience from the field with a lesson and recommendation to conclude. Most cases present an account of Solidaridad's landscape practitioners' own experience and reflections, while other cases build on internal reporting and communication on programme achievements and results.

Guiding questions for each chapter are:

- 4.1 Are MSPs effective, efficient and relevant to realise positive change for stakeholders in the landscape?
- 4.2 How can we understand landscape challenges at appropriate spatial and temporal scales to design actionable solutions?
- 4.3 What are best practices to engage and motivate private sector partners to contribute to sustainable landscape management?

- 4.4 How does the MSP contribute to Landscape Governance? What interventions or new governance arrangements enhance natural resource management in the landscape?
- 4.5 How can we finance sustainable farm practices, responsible business conduct and landscape level solutions? What are efficient and effective ways to jointly identify and design investment opportunities with positive landscape impact?

**Disclaimer:** Case examples do not evenly represent all landscape programmes. As a result of active engagement with a select number of landscape practitioners for the production of this final report, the experiences from landscape programmes in Paraguay, Nicaragua, Honduras, Zambia and Tanzania feature more prominently.

# LANDSCAPE PROGRAMMES FROM AROUND THE WORLD



## 1. HONDURAS

**Zona Litoral del Norte** - Avoiding deforestation and land degradation caused by rapid expansion of oil palm plantations into the fragile coastal zone of Honduras by exploring jurisdictional RSPO certification and piloting and promoting cocoa-centric agroforestry systems as an alternative to palm oil, on too-steep slopes.



## 2. NICARAGUA

**Southern Autonomous Region of Caribbean Coast** - Avoiding deforestation and land degradation caused by unregulated expansion of livestock and oil palm production systems into remaining rainforest around Rama and Kukrahill, creating an integrated sustainable landscape management framework to support both profitable and environmentally-friendly production and agroforestry systems.



## 3. PARAGUAY

**Chaco** - Promoting dialogue with local government, farmers, indigenous people, meat companies and conservation CSOs for innovative development approaches and models that enhance livestock production systems, while avoiding further deforestation, and that address water scarcity and food security at community level to help producers and their communities adapt to changing weather patterns.



## 4. TANZANIA

**Kilimanjaro Transboundary region** - Shifting land use policies through landscape management approaches that promote food security and sustainable economic development, whilst reducing the severity and extent of land degradation in the Kilimanjaro region.



## 5. ZAMBIA

**Lower Kafue Sub-Basin, Mazabuka** - Advocate change in land and water use management by different sector actors within the Kafue River Basin, by promoting innovative solutions for the sustainable and equitable use of water and natural resources.



## 6. INDIA

**Middle Ganga Plain, Uttar Pradesh** - Facilitating stakeholder dialogue and testing innovative models for water catchment area management approaches in alignment with Clean Ganga Mission (CGM) of Government of India, to address water scarcity and water pollution caused by the sugar-cane and leather tannery industries in the central part of the Ganga Basin.



## 7. INDONESIA

**Mount Merapi, Central Java** - Development of an inclusive regional sustainable Landscape Management Framework in Central Java, for the integration of principal (soy) and secondary (food) crops in a sustainable cropping system through piloted, proven and scalable landscape solutions that help address deforestation and food scarcity.

# OUR LESSONS

## LANDSCAPE PRACTITIONERS SHARE THEIR EXPERIENCE IN STORIES FROM THE FIELD

ARRANGED BY BUILDING BLOCKS



LANDSCAPE KNOWLEDGE



BUSINESS IN LANDSCAPES



MULTI-STAKEHOLDER PLATFORM



LANDSCAPE GOVERNANCE



LANDSCAPE FINANCE

1



Building relationships and trust takes time, but they are the foundation of strong partnerships. MSPs are effective if stakeholders feel safe to contribute and hold each other accountable.

CASE STUDY ON PAGE 34

2



Hosting MSP meetings at village level allows local voices to be heard. Connecting local realities with policy at district, regional, or national level allows for coordinated action.

CASE STUDY ON PAGE 36

3



Combining stakeholder experience with sector specific and technical expertise is the success factor for action planning and finding viable solutions.

CASE STUDY ON PAGE 38

4



Smart planning of pilot interventions in the landscape can maximise results and deliver impact.

CASE STUDY ON PAGE 44

5



Extension support systems deliver high value and sustainable performance when combining capacity building, data, and business case development.

CASE STUDY ON PAGE 46

6



Scenario modelling, if designed around the agreed upon ambitions of the landscape stakeholders, is a powerful tool to focus a landscape action planning process.

CASE STUDY ON PAGE 48

7



Pay attention to direct needs of producers and identify market opportunities linked to these needs with attention for climate adaptation and resilience.

CASE STUDY ON PAGE 56

8



Empowered producers know their product, their supply chain and their customer, and are able to negotiate better prices, enhancing their economic position.

CASE STUDY ON PAGE 58

9



Through coordinated action and incentives at landscape level, producers can lead the way in environmental stewardship and Natural Resource Management.

CASE STUDY ON PAGE 60

10



Cultural practices and community needs have to be addressed in land and resource governance arrangements to ensure local ownership and accountability.

CASE STUDY ON PAGE 68

11



Institutional challenges at national level can inhibit required investment in local governance arrangements and stall progress in establishing decentralized management structures.

CASE STUDY ON PAGE 70

12



Voluntary Sustainability Standards add to the smart mix of governance arrangements and can inspire change for collective action at sector level.

CASE STUDY ON PAGE 72

13



Access to finance triggers an upward cycle for improved farm performance. Monitoring builds trust in co-designing finance solutions.

CASE STUDY ON PAGE 78

14



MSPs allow for joint analysis of issues and needs, and help identify interventions and long-term landscape solutions.

CASE STUDY ON PAGE 80

15



Solidaridad is uniquely positioned as a neutral actor to facilitate landscape partnerships and can play a critical role in facilitating access to finance and enabling investments.

CASE STUDY ON PAGE 82

# 4.1 MSPs FOR COLLECTIVE ACTION



Are MSPs effective, efficient and relevant to realise positive change for stakeholders in the landscape?

## 4.1.1 DEFINITION AND RELEVANCE

Multi-stakeholder Partnerships (MSPs) can be defined as:

“A process of interactive learning, empowerment and participatory governance that enables stakeholders with interconnected problems and ambitions, but often differing interests, to be collectively innovative and resilient when faced with the emerging risks, crises and opportunities of a complex and changing environment.”<sup>6</sup>

## 4.1.2 PLATFORM FOR DIALOGUE

Solidaridad committed to setting up a Multi-stakeholder Platform (MSP) as one of the key intervention strategies in the implementation of landscape programmes. The platform represents the dialogue space created for the diversity of stakeholders within or connected to the landscape. Facilitation and overall support for this process of

## MSPs ALLOW FOR BRINGING TOGETHER GOVERNMENT, PRIVATE SECTOR, CIVIL SOCIETY ORGANISATIONS, COMMUNITY REPRESENTATIVES, PRODUCER GROUPS AND ACADEMIA.

stakeholder engagement is fundamental for Solidaridad to work together with a wide diversity of actors. MSPs allow for bringing together government, private sector, civil society organisations, community representatives, producer groups and academia. MSPs fulfill a critical task in bridging gaps across sectors and across scales, since most often this space for cross-sector dialogue does not exist or is lacking in form or function. On the short term, MSPs enable new initiatives by identifying priorities and supporting experimentation through pilots. In the long term, new ways of working can be supported at scale or governance structures can be designed and formally embedded as the new normal.

## 4.1.3 MSP: A VEHICLE FOR CHANGE

The focus of the MSP in landscape programming is to understand and address challenges related to natural resource use and management (such as land, forest, and water) and increasing system resilience and adaptation capacity dealing with climate change - short-term shocks and long-term trends - while taking into account changing dynamics such as population growth, food security, energy needs, employment, and urbanisation. The task of setting up an MSP is actually a process of organising a network of actors to

## KEY STRENGTHS OF THE MSP MODEL IN LANDSCAPE PROGRAMMING

- 1 Joint understanding of the landscape through integrated system perspective, addressing dependencies, interconnections and trade-offs, now and in the future.
- 2 Connecting national policy with local reality, enabling alignment and coordination of resources to facilitate innovative governance arrangements at appropriate scale (such as community, landscape, district) to deliver on decentralised mandates for land, water and forest management.
- 3 Connecting thematic expertise (on a wide range of themes, from livestock management to water management) with the producers and users of resources who own context specific local knowledge of resource issues and management constraints.
- 4 Joint planning: prioritisation in allocation of scarce resources and bundling both human capacity and financial resources to take action.
- 5 Joint implementation: learning by doing, working with what is there, piloting innovations, gathering evidence for business models and developing buy in for adoption at scale.



interact with each other and work towards shared goals to improve the landscape and well-being of stakeholders. For Solidaridad values such as participation, inclusion and ownership are important to ensure that diverse perspectives and needs are acknowledged and power imbalances can be addressed.

#### 4.1.4 EXTERNAL EVIDENCE

The most recent publication on integrated landscape approaches by Reed (2020) affirms the importance of a multi-stakeholder dialogue platform and stresses the following key criteria for effectiveness: “The configuration of such a platform requires considerable planning to account for issues related to representativeness and political, technical, epistemological, gender and class power differentials (Sarmiento-Barletti and Larson, 2019). Previous research on the effectiveness of multi-stakeholder platforms has highlighted the need to strengthen links between higher and lower level actors in order to prevent further entrenchment of pre-existing inequalities and injustices (Hermans et al., 2017). The use of independent facilitation, governance monitoring frameworks (Kusters et al., 2018), and tools for stimulating multi-stakeholder negotiation (for a collection see Brouwer et al., 2015) can support this process. Meanwhile, ensuring that multi-stakeholder processes formally influence decision-making forums is essential for continued relevancy and stakeholder (particularly political) engagement (Fraser et al., 2006).”<sup>7</sup>

Building on both internal lessons and external scientific evidence, Solidaridad has consolidated the learnings on facilitating MSPs in an internal guidance document: Multi-stakeholder Partnership Policy Guidelines, Guidelines on main-streaming Inclusivity when setting up a landscape MSP.<sup>8</sup>

### TOOLS & GUIDELINES

- [The MSP Guide](#)
- [MSP Monitoring and Evaluation](#)
- Solidaridad Multi-Stakeholder Partnership Policy Guidelines (internal toolbox)

#### 4.1.5 HOW DOES A MULTI-STAKEHOLDER PROCESS CONTRIBUTE TO THE OVERARCHING GOAL OF SUSTAINABLE AND INCLUSIVE LANDSCAPES?

##### COLLECTIVE ACTION

The MSP helps translate global goals and national commitments to local action. The MSP is a vehicle to coordinate action on the ground and can connect local reality to national land policy. Also, it can help to mobilise funds by leveraging and coordinating existing funds or attracting new investments.

##### EFFECTIVE GOVERNANCE ARRANGEMENTS

The MSP can formulate and design innovative local governance arrangements regarding land and resource use. Stakeholders need to own these governance solutions for them to work; rules and policies need to be known, make sense and have effective accountability mechanisms.

##### DEALING WITH SHOCKS AND CHANGE

The MSP can coordinate action when shocks occur and contributes to system level resilience through adaptive management: for example by responding to climate change challenges such as flooding in the Chaco landscape in Paraguay which required an emergency response as well as long-term adaptation strategies for water harvesting to deal with prolonged periods of drought.



**TABLE 1: PROCESS STEPS FOR FACILITATION OF MSP AS PRESENTED IN “THE MSP GUIDE”.**

Initiating	Adaptive Planning	Collaborative Action	Reflective Monitoring
Clarify reasons for an MSP	Deepen understanding and trust	Develop detailed action plans	Create a learning culture and environment
Undertake initial situation analysis	Identify issues and opportunities	Secure resources and support	Define success criteria and indicators
Stakeholders, issues, institutions, power and politics	Generate visions for the future	Develop capacities for action	Develop and implement monitoring mechanisms
Establish interim steering body	Examine future scenarios	Establish management structures	Review progress and generate lessons
Build stakeholder support	Agree on strategies for change	Manage implementation	Use lessons for improvement
Establish scope and mandate	Identify actions and responsibilities	Maintain stakeholder commitment	-
Outline the process	Communicate outcomes	-	-

# 4.1.1 BUILDING TRUST



## ***Bridging the distance: addressing conflict and inequality – by Mario Salas, Chaco Landscape in Paraguay***

In the Paraguayan Chaco, Solidaridad is working in the Irala Fernandez District together with the municipality, the agricultural ministry, a national research institute, two major dairy cooperatives, and the indigenous communities to improve production of food crops, enhance land management through silvopastoral grazing schemes, and increase the communities' climate resilience. The latter is important to deal with prolonged periods of droughts as well as severe flooding.

## **WE ARE HERE TO LISTEN, NOT TO JUDGE - MARIO SALAS**

Mario Salas, Programme Manager for the Chaco Landscape, reflects on the MSP as the best element of the landscape programme: "(...) because it is the way in which you engage with the stakeholders in the landscape. Through the MSP we engaged vulnerable people, we had the opportunity to hear the needs and issues of the landscape and prioritise. Through this process we have learnt that building trust takes a long time and stakeholders need to be involved in every step of the way, from the planning to the execution of the solution because this gives them a sense of belonging and creates an environment of shared development between the stakeholders."

This dialogue space and collaboration between stakeholders is the result of strategic and diplomatic efforts from Solidaridad, building relationships over time. At the start of the programme the German Mennonite cooperative and the Paraguayan cooperative were not on speaking terms, and also the leadership of indigenous communities were reluctant to join the MSP. By investing in a preparatory stage of bilateral meetings with stakeholders, Solidaridad could understand their respective challenges and gain credibility as a trusted partner. In addition to overcoming the hesitation of stakeholders at the start, continuous efforts are made to ensure all actors remain on board.

Practical solutions are for example to rotate the location of the MSP, hosting the meetings in different locations, to equally share the burden of travelling long distances across the landscape and providing financial support to cover travel costs. Another example is to invest in the social aspect of coming together by organising an "asado" (Paraguayan traditional barbecue) and by adding weight to the meeting by inviting political leadership, which increased the incentive and motivation for stakeholders to attend.

### **LESSON**

It takes time to build relationships and trust, but this is the foundation of strong partnerships. The MSP can be effective if stakeholders are willing to attend, feel safe to contribute to the dialogue and hold each other accountable for follow-up action.

### **RECOMMENDATION**

Invest time and staff capacity in getting to know the stakeholders you aim to engage in an MSP and make sure to communicate openly about 1) who Solidaridad is 2) what the aim is of the landscape programme and 3) manage expectations on form and function of MSP, expressing clearly the values of inclusion, participation and shared responsibility for the MSP process.

## 4.1.2

# CONNECTING POLICY WITH PRACTICE



### **Facilitating cross scale linkages in MSP model: connecting policy and practice – By Nancy Rapando and Maria Sengelela, Kilimanjaro Landscape in Tanzania**

The Kilimanjaro Landscape has been under threat of increased human activities and unsustainable land use practices, resulting in loss of biodiversity and massive land degradation which are affecting water and soil. Solidaridad aims to shift land use policies so that they become complementary and supportive of sustainable agricultural, forestry and natural resource management. We work with coffee, banana and livestock producers on and around Kilimanjaro Mountain.

## THROUGH LOCAL AND DISTRICT-LEVEL DIALOGUES, GRASSROOTS ISSUES ARE NOW PART OF THE NATIONAL POLICY AGENDA - MARIA SENGELELA

Nancy Rapando, Climate and Landscape expert for Solidaridad East Africa, explains how the MSP model in the Kilimanjaro landscape has facilitated cross-scale linkages between local, district and national actors in the landscape. The MSP in the Kilimanjaro Landscape programme has a governance structure that mandates the participation of all stakeholders within the landscape at different levels. The levels include: i) village level, where community issues and ideas are raised and addressed; and ii) district-level, comprising of a group of representatives of stakeholders from different sectors.

Maria Sengelela, Landscape Programme Coordinator, explains that this MSP model allowed for the village meetings to be held in their own language and to be hosted in a way such that everyone could participate locally. The district level meetings allowed for subject matter specialists (for example on livestock, agriculture and forestry) to provide technical expertise on resolving and finding solutions to the issues raised at the village MSPs. The district MSPs further feed into the regional or national policy dialogue that look at issues relating to the whole landscape addressing both upstream and downstream issues in a connected manner. Other interventions reside at the local level, where the community can provide their own resources and take action among themselves.

By connecting the dialogue spaces at different levels, the diversity of perspectives have contributed to a shared understanding of the current situation of land degradation and what to do about it. Current land use practices which are detrimental to the landscape include overgrazing, degradation of forest (for example the buffer zone of the National Park) and soil erosion as a result of farm practices and burning the land for clearing. By understanding the needs of actors involved – from the perspective of pastoralists, farmers, wildlife management and town planning –

priority interventions were identified. As a result, pilots were set up and implemented with relevant actors such as implementation of Village Land Use planning and Community Based Forest Restoration initiatives. The results of these experiences were reported back to the MSP dialogue to enable uptake and scaling through national actors, such as the National Land Use Planning Commission.

### LESSON

Hosting MSP meetings at the village level allows for local voices to speak up and be heard. Connecting these local realities with policy dialogue at district, regional or national level, allows for coordinated action to address needs and garner (public) support for implementation of identified solutions. Solidaridad can play a critical role in bringing local issues to the policy agenda as well as advocate for viable solutions based on experience in practice.

### RECOMMENDATION

Consider multiples scales and levels in formation of the MSP model and when organising MSP meetings, consider to space out in timing and location. This requires partnerships at different institutional levels and smart planning with attention for political agendas as well as appropriate timing for agenda setting and showcasing solutions. Organising site visits, where policy makers meet the community, or by facilitating community representatives to share their experience at a high-level policy meeting are other ways to facilitate cross scale linkages.

*Further reading:*

*Solidaridad East & Central Africa (2019) “Balancing Productivity and Conservation under High Value Ecosystems: The Kilimanjaro Landscape Solutions Publication”. Nairobi, Kenya.*

# 4.1.3 COLLABORATIVE ACTION



## **Technical Working Groups: Sector expertise and local capacity for action – by Pamidzai Bota and Conor Dolan, Mazabuka Landscape, Zambia.**

In Mazabuka district of the lower Kafue Sub Basin, Solidaridad raises awareness on the risks of land degradation. It advocates for a change in land and water management by the public and private sector as well as communities. Poor agricultural practices, (overgrazing and river bank degradation) have damaged soil quality and the basin ecosystem, resulting in biodiversity loss and a loss of habitat for fish to spawn and grow. Solidaridad supports river bank protection and promotes tree planting through working with community natural resource management committees. Other solutions being implemented are supporting vegetable producers to deliver high quality organic produce for local market and an investment in a hatchery facility for fish producers, to promote aquaculture and address overfishing in the river.

## **THE REAL STRENGTH WAS WHEN PEOPLE WENT INTO GROUPS TO ANALYSE THE LANDSCAPE AND COME UP WITH ACTIVITIES.** - CONOR DOLAN

The MSP in the Mazabuka Landscape is hosted by the Mazabuka Town Council and chaired by the civil society organisation People's Action Forum (PAF). MSP meetings are held quarterly and bring together district level government representatives, local community representatives, CSOs and traditional leadership. What stands out in the MSP model in the Mazabuka Landscape is the formation of Technical Working Groups. From the start, the MSP stakeholders set out to find solutions to address challenges in the landscape and for this reason Technical Working Groups were formed, to tap into specific sectoral expertise on the following topics: Fruit and Vegetable production, Livestock, Natural Resource Management, Fisheries and Aquaculture. These Technical Working Groups meet twice a year to share progress and plan activities.

In addition to the quarterly MSP meetings, smaller group meetings were held to focus on specific issues and align on next steps. The Technical Working Groups allowed for a structure where sector specific expertise worked directly with relevant stakeholders in the landscape – such as fishery communities, livestock communities and vegetable producers. Once stakeholders were grouped together in this way, it allowed for action planning and helped to operationalise advice and activities effectively. This resulted in better design of interventions due to a reality check with the situation on the ground. Also, technical experts are better able to provide relevant advice and take into account diversity of interests through better understanding of local context and actors.

Looking back on the process of setting up the MSP, there was heavy emphasis on formalising the governance structure from the start, with the formation of a steering committee and clear division of tasks. In reality this structure did not function as

planned. Conor Dolan, Water Governance Expert for Solidaridad Zambia, explains: “It was not lack of commitment, but rather the lack of incentive or understanding what was at stake in that early phase of starting the MSP. Now our strategy is: identify those who are interested and want to lead and give them the responsibility to call for future meetings.”

Another challenge encountered by Solidaridad during the facilitation of MSP meetings is that the effectiveness of a meeting highly depends on who attends. For example, when a meeting was largely attended by government representatives and facilitated by local NGOs on the topic of water pollution issues, the activity plan coming out of that meeting was very unrealistic.

### **LESSON**

Technical Working Groups combined sector specific expertise with relevant stakeholder groups, who have a clear incentive and role to play. Working in smaller groups helped action planning and implementation of activities by mobilising necessary human and financial capacity. This approach was critical to translate the MSP dialogue in concrete actions.

### **RECOMMENDATION**

While the MSP provides a valuable platform for networking, dialogue and capacity building, this does not necessarily translate into relevant action in the landscape. For Solidaridad it is critical to help organise collaborative action so the results from pilot activities can be reported back to the MSP. In this way, we keep up momentum and secure credibility of the MSP as an effective strategy to mobilise stakeholders.

# 4.2 KNOWLEDGE ABOUT THE LANDSCAPE



How can we understand landscape challenges at appropriate spatial and temporal scales to design actionable solutions?

## 4.2.1 DEFINITION AND RELEVANCE

The definition of “Knowledge” is “awareness, understanding, or information that has been obtained by experience or study, and that is either in a person’s mind or possessed by people generally”. Knowledge is highly dependent on your education, experience, perspective and values. If you learn to look in a different way, you will see something new and understand the situation or context differently. There is a risk to limit “knowledge about the landscape” to a monitoring framework with certain indicators which measures landscape performance. This section aims to emphasise that knowledge about the landscape is owned by different stakeholders and their respective diversity of perspectives, which is an important starting point in a multi-stakeholder partnership approach.

# STAKEHOLDERS NEED A SHARED KNOWLEDGE BASE ABOUT THE LANDSCAPE TO INFORM DECISION MAKING IN EFFECTIVE LANDSCAPE PROGRAMMING

## 4.2.2 BUILDING A SHARED KNOWLEDGE BASE

Solidaridad committed to contribute to collect information and build a collective body of landscape knowledge to inform decision making and planning for more sustainable landscape management. This happened both within the MSP and together with local and international (research) institutions. This shared knowledge base is a critical foundation for analysis, decision making, action, monitoring and communication in effective landscape programming. Below three generic insights are shared, which emphasise the strategic importance of consciously building landscape knowledge. Table 2 (page 43) provides an overview of activities related to building landscape knowledge undertaken by Solidaridad, across all landscape programmes. Lastly, three programme specific examples are highlighted to illustrate our experience from practice.

## 4.2.3 KNOWLEDGE ACROSS SECTORS AND SCALES

Through efforts of capacity building, collective action and commissioned studies or research assignments Solidaridad supported joint learning and enhanced access to information about the landscape for stakeholders. MSPs fulfill a critical task in bridging gaps across sectors and across scales, since most often this space for cross-sector dialogue does not exist or is lacking in form or function. Effective collaboration between different sectors and institutions is a real challenge and knowledge exchange does not happen automatically or effectively. Reed (2020) notes that: “The interplay between local institutions and research organisations or government agencies—despite being a pre-requisite to effective co-production—is often lacking as they respectively have neither a history of, nor enthusiasm for, such engagement.”<sup>9</sup>

## DIMENSIONS OF KNOWLEDGE

For sake of simplification and to highlight the specific role of Solidaridad in building landscape knowledge, we distinguish four dimensions of “knowledge about the landscape”:

- 1 The stakeholders’ understanding of the landscape approach.
- 2 The individual stakeholder’s knowledge on the landscape (based on perspective, role, experience, expertise etc.).
- 3 Institutional knowledge and expert knowledge from governments or institutions with a mandate to manage (part of) the landscape and its natural resources.
- 4 The collective understanding of the landscape at system level (for example in context of MSP partnership).

#### 4.2.4 COMBINING OLD AND NEW: INDIGENOUS KNOWLEDGE AND NEW TECHNOLOGIES

Solidaridad found that in order to have sustainable adoption of landscape solutions or best practices, it is better to build on positive indigenous knowledge the community already has while showcasing alternatives to negative indigenous practices. In addition, smart combinations of community driven traditional systems and new technology (where applicable) have the potential to enhance accountability of local stakeholders in sustainable landscape management. At times there is tension between scientific or technical knowledge and local, indigenous or traditional knowledge. Reed (2020) observes the risk that “local knowledge might not be recognised or trusted” by academia and government institutions, compared to what is considered “expert knowledge”. Furthermore, local knowledge “may not be easily articulated or may arise from a different world-view with alternative assumptions, norms and rules”. While modern technologies (like GIS) and system level monitoring efforts (LandScale) offer insights in landscape performance, it is the indigenous knowledge from local stakeholders – how they know their landscape based on their history, culture and experience in daily practice – that is critical for sense-making of monitoring data and incentivise change in practices.

#### 4.2.5 LEARNING BY DOING: MONITORING TO TRACK PROGRESS AND ADAPT

Solidaridad has closely monitored pilot interventions to develop evidence and support business case development. The MSP has been a functional forum to present experiences and results, to share lessons and to explore finance and investment solutions. However, monitoring at landscape scale on land use change and landscape level impact is identified as a weakness and continues to be a challenge.

Action planning and implementation through a multi-stakeholder process requires active monitoring on

different levels. This includes monitoring at process level (for accountability: are we doing what we planned) and monitoring for effectiveness (do the interventions have the desired effect). Moreover, a long-term perspective seeks validation of a business case or the enabling conditions to scale certain solutions. This requires evidence to prove the investment case or to advocate for supporting legislation or public funds. Lastly, monitoring can assess impact at landscape level when tracking land use change or quality of natural resource management (water, forest, land). Central to any effort of monitoring and any form of data collection is that it is analysed, interpreted and re-visited. This also requires the involvement, engagement and ownership of local institutions to build permanent monitoring systems for resource management to last beyond the landscape programme (read more about Landscape Monitoring in text-box 4, page 88-89).



**TABLE 2:  
LANDSCAPE KNOWLEDGE: OVERVIEW OF INTERVENTIONS  
ACROSS PROGRAMMES**

Dimension of knowledge	Example of Solidaridad intervention/effort:
<p><b>Dimension 1:</b> Stakeholders understanding of the landscape approach</p> <p><i>Build capacity of stakeholders on “What is a landscape” and “What is a landscape approach”?</i></p>	<ul style="list-style-type: none"> <li>Active communication and presentation on scope and ambition of landscape programme to inform and manage stakeholder expectations (in print, online, via media channels and during meetings/events)</li> <li>Facilitated training courses on “Landscape Approach” or “Integrated Landscape Management” (for example: Landscape Leadership Course in Mesoamerica)</li> </ul>
<p><b>Dimensions 2 &amp; 3:</b> Stakeholders (individual, group, institution) knowledge about the landscape (based on perspective, role, experience, expertise etc.)</p> <p><i>Collect existing and generate new knowledge by combining indigenous and scientific knowledge. Identify knowledge needs and gaps.</i></p>	<ul style="list-style-type: none"> <li>Facilitating dialogue and exchange in MSP (ongoing process) to create a platform for stakeholders to share their perspective and their knowledge of the landscape</li> <li>Knowledge partnerships with research institutes and universities in the landscape to bring in external expertise and analysis about the landscape.</li> <li>Capacity assessment and needs assessment of producer groups and CSOs (identify gaps, understand way of working)</li> <li>Monitoring of pilot interventions with producer groups, private sector and CSOs (generate buy in to change practices, build evidence to understand what works)</li> </ul>
<p><b>Dimension 4:</b> Collective understanding of the landscape at system level (for example in context of MSP partnership)</p>	<ul style="list-style-type: none"> <li>Presentation of progress based on experience and monitoring pilots in MSP (accountability, sharing successes and learning)</li> <li>Communication about planning and progress in MSP through minutes, newsletters and website (external visibility)</li> <li>Conducting Landscape Scoping Analysis and Climate Vulnerability Assessment or other research assignments to generate knowledge and in depth understanding on specific topics (land use change, water, biodiversity).</li> <li>Development of landscape level monitoring systems with local stakeholders and institutions (for example on soil, grazing, water, forest)</li> <li>Partner with research institutions to collect, validate and publish experience and findings (can be used for policy influencing as well as informed decision making).</li> </ul>

# 4.2.1 INFORMATION SYSTEMS FOR NATURAL RESOURCE MANAGEMENT



## **Connecting interventions across scales to enhance system level resilience - Conor Dolan, Water Governance expert, Mazabuka Landscape, Zambia.**

In Mazabuka district, part of the lower Kafue Sub Basin in Zambia, Solidaridad raises awareness on the risks of land degradation. It also advocates for a change in land and water management by the public and private sector as well as communities located in the Magoye and Kaleya catchment areas. Poor agricultural practices, overgrazing of grassland and degradation of river banks have damaged the quality of soil as well as the ecosystem health of the basin.

The land and water management challenges in the Mazabuka landscape cut across sectors and involve a range of actors. Major challenges around water relate to availability, access, distribution and quality. Key sectors are agriculture, livestock and fisheries. On producer level there are practices that lead to land degradation and negatively affect the water cycle and water quality: overgrazing, burning of land, cutting wood for charcoal, soil erosion and uncontrolled sand mining in river bedding for brick making. At the same time producers in agriculture and livestock face challenges to access water for irrigation and watering their cattle, and suffer the effects of contamination of ground- and surface water. Large scale sugar-cane production places a huge demand on the fresh water supply and waste water discharge is contaminated with fertilizer and pesticides. Solidaridad initiated various interventions at different scale levels, including the development of information systems to monitor, manage and incentivise best practices in natural resource management.

### **Macro level: Catchment assessment**

In partnership with the Water Resource Management Authority (WARMA), a catchment assessment was conducted to understand the current status of water abstraction and distribution in the Kaleya catchment. Such an assessment informs the development of a Catchment Management Plan and provides clarity on water allocation to prevent conflicting claims. Furthermore, it directly informs the formation of a water users association (WUA).

### **Meso level: Range-land monitoring for livestock management and grassland restoration**

The Nambola livestock programme introduced a holistic farm management model with support of Grassroots Trust. The aim is to enhance climate resilience of rangeland and farming areas through sustainable livestock and land management systems. Interventions included capacity building, organising livestock herders in clusters and setting up a geographic information system to guide rotational grazing. This rangeland monitoring system was designed with GeoTerra to oversee grassland quality and curb overgrazing. With this system, pastoralists have access to management information as well as a clear incentive when and where to move their cattle to

access quality forage. In addition, this data helps build the evidence for regeneration of the grazing land over time and monitors the practice of burning.

### **Micro level: Smallholder irrigation study**

Solidaridad partnered with non-profit organisation PRACTICA to conduct a socio-economic and technical assessment survey on smallholder irrigation, including indicators such as: access to markets, access to finance, organisational capacity, suitable technical conditions, availability for low cost irrigation equipment, the availability of sufficient water and suitable land and smart design of irrigation systems. Forty-six demo sites are planned as pilots to assess the applicability of shallow groundwater extraction and solar irrigation technologies to help provide water for small scale farmers.

Each activity addresses land and water management at a different scale level in the landscape. The catchment assessment provides macro-level information for basin management by the national authority, grassland monitoring provides meso-level information to inform collaboration of pastoralist groups and the smallholder irrigation study on micro-level informs water access solutions for individual producers. When combined, they each contribute to a systems-level understanding, through insights in feedback loops and dependencies regarding availability, access and quality of water.

## **LESSON**

Smart planning of pilot interventions can maximise results and deliver impact. Purposefully seeking out linkages across scales helps building evidence and understanding how interventions at appropriate scale levels add up to enhanced system level resilience.

## **RECOMMENDATION**

Select site locations for pilot interventions in such a way that it can: 1) facilitate cross sector learning and sharing between stakeholders involved; 2) identify system level connections to better understand resource management challenges and solutions connecting across scale levels in the landscape.

## 4.2.2 MONITORING CLIMATE SMART PRACTICES



### ***Critical knowledge creation through Landscape pilots to prove performance of climate smart technologies and practices – by Mario Salas, Chaco Landscape in Paraguay***

Solidaridad Paraguay supports a multi-stakeholder dialogue platform in the Municipality of Irala Fernandez. The “Sustainable Production Working Group for the Paraguayan Chaco” has been created to facilitate an honest dialogue with the local government, dairy farmers, indigenous people, and CSOs to develop a shared vision and solutions for Adaptation and Mitigation to the Climate Change Effects.

## **INFORMATION IS THE CORNERSTONE OF AGRICULTURAL PLANNING AND PROFITABILITY - MARIO SALAS**

To assist dairy producers addressing some of the key challenges in their landscape (such as low yields, access to finance and limited technical assistance), an extension team was formed, dedicated to work with dairy cooperatives, and to transfer knowledge and technologies to cope with climate change effects. This extension team provided ongoing assistance to producers via on-farm technical support, logging issues and solutions in a software system for future references, feedback and data-recording. This approach resulted in detailed descriptions of dairy operations which helped to identify priority actions and deliver a tailored action plan for each of the pilot farms. Proposed practices included recovery of degraded pastures, nutritional supplements in animal feed, improvements in the health and reproductive management of the herd and improved farm management.

One year after progressively adopting good dairy production practices, milk productivity on participating farms increased by an average of 16%, while GHG emissions declined by 31% per hectare – resulting in 64% less GHG emissions per litre of milk produced. Through the close monitoring of the dairy pilot farms, Solidaridad gathered evidence to showcase this increase in yield and income as a direct result of applying Climate Smart Technologies (CST). In 2019, the participating cooperatives showed an average increase in their total output production of 17% in spite of the adverse climatic events (drought and floods) that occurred in the region.

The structured collection of data was part of the intensive technical assistance farmers received. Data collection did not only benefit the adoption of good practices, it also allowed to:

- Define the GHG emissions for the Business as Usual (BAU) scenario and measure the reduction of GHG emissions when climate smart practices

are applied.

- Present investment proposals on climate smart technologies for cooperatives.
- Disseminate the proven model as evidence of climate smart technologies for future scaling

The monitoring system introduced to support farm management gives direct feedback and information to the farmer, the extension team and – over time – builds the evidence required to secure funding by showcasing performance and professional farm management. This type of knowledge creation from pilot interventions has a high return on investment because it increases buy in and learning at producer level and the generated evidence allows for copying (interest from other dairy cooperatives) and scaling (access to finance, see case study on access to finance in section 4.5.1).

### **LESSON**

A structured approach to extension support combines capacity building, data and information management and business case development in such a way that it provides relevant insights in both environmental and economic performance. This is a team effort between producers and the extension team.

### **RECOMMENDATION**

Include monitoring and data collection in producer support systems from the start. Partner with local (research) institutions to build on existing knowledge systems and choose appropriate technology to make sure digital solutions can also function in remote locations and are sensitive to different levels of (digital) literacy of the target group.



# 4.2.3 SCENARIO MODELLING FOR LANDSCAPE SOLUTIONS



## **Participatory Scenario Modelling: Understanding trends and trade-offs in future landscape development – Paisajes Sostenibles (PASOS), Honduras in partnership with the Dutch Environmental Assessment Agency (PBL)**

In the Zona Litoral del Norte, rapid expansion of oil palm plantations threatens the future of remaining forests and other fragile natural ecosystems as well as the food security of communities. Solidaridad has identified a unique opportunity to orient the entire palm oil sector towards the implementation of sustainability measures as the sector expands. This sector oriented approach has grown into the landscape initiative Paisajes Sostenibles (PASOS).

## **SCENARIO MODELLING IS A POWERFUL TOOL TO FOCUS A LANDSCAPE ACTION PLANNING PROCESS**

PASOS brings together a broad range of stakeholders from the oil palm sector and also includes other actors, such as: cocoa and eco-tourism companies; indigenous peoples' and community-based organisations; farmer organisations and cooperatives; municipal governments; research institutes and universities; community water associations, and non-profits.

Solidaridad partnered with the Dutch Environmental Assessment Agency (PBL) and EcoAgricultura Partners in a research project piloting participatory landscape scenario modelling with the aim to develop and assess the use of spatially explicit modelling and scenario tools to help stakeholders in integrated landscape initiatives achieve multiple SDGs (sustainable development goals) by clarifying stakeholder ambitions, baseline developments and identifying options for action and investment priorities.

In the PASOS landscape in Honduras Solidaridad facilitated the process bringing together landscape stakeholders bi-laterally and in workshop setting to, first, collect information on land use, demography and climate, and later to discuss and validate the scenarios which mapped the trends in the landscape. As a result of this process three different scenarios were developed: 1) Business as Usual, 2) Integrated Landscape Management, and 3) Accelerated growth.

The spatially-explicit evidence generated with the scenario modelling exercise highlighted urgent issues such as: uncontrolled expansion of oil palm, deforestation, scarcity of water resources (due to land use change, climate change and pollution), food insecurity, unemployment and insecurity of tenure rights. The evidence and recommendations supported awareness raising, advocacy and action planning with targeted interventions in the PASOS landscape.

This participatory approach to scenario modelling contributes to knowledge creation through:

- Analysis of the current landscape situation (land use, water, climate change, demography) as well as projecting future trends and anticipating changes in the landscape;
- A capacity building process of landscape stakeholders learning about the landscape and from each others perspective;
- A shared foundation of knowledge about the landscape;
- Evidence based policy influencing highlighting resource management challenges, dilemmas and trade-offs.

### **LESSON**

Scenario modelling, if designed around the agreed upon ambitions of the landscape stakeholders, is a powerful tool to focus a landscape action planning process.

### **RECOMMENDATION**

Acknowledge and build on existing knowledge and knowledge systems of the diversity of stakeholders in the landscape and partner with local and global knowledge institutions.

*Further reading:*

- PBL (2018) "Modelling the impact of integrated landscape management on SDGs". The Hague, The Netherlands.

- Meijer, Scherr, and Giesen (2018) *Spatial scenario modelling to support integrated landscape management in the Caribbean North Coast of Honduras*, PBL Netherlands Environmental Assessment Agency and EcoAgriculture Partners, The Hague.

# 4.3 BUSINESS IN LANDSCAPES



What are best practices to engage and motivate private sector partners to contribute to sustainable landscape management?

## 4.3.1 DEFINITION AND RELEVANCE

The private sector is a key partner in addressing sustainability challenges and implementing solutions. Solidaridad landscape interventions target areas where agricultural commodity production put high pressure on the environment (see table 3, page 53). Production landscapes host a diverse range of economic activities - both in agriculture, industry and other sectors - with a wide range of business actors involved. Therefore private sector engagement is a critical element in the landscape approach.

## 4.3.2 NEW PERSPECTIVES

Based on the practical experience in the landscapes where Solidaridad is active, new perspectives on the role of business actors and potential market development to achieve positive impact in the landscape have gained traction: 1) attention for new markets to meet local needs, 2) improvement of market linkages through supply chain connections and agreed quality standards of practices and

**FOR PRIVATE SECTOR TO BECOME PART OF THE SOLUTION, KEY INGREDIENTS ARE: INTRINSIC MOTIVATION, AWARENESS ABOUT IMPACT AND ENABLING CONDITIONS TO ACT.**

products, and 3) exploration of business incentives for natural resource management and nature restoration. See text-box 3 (page 54) for a deep dive on these new perspectives on the role of business actors. Table 4 (page 55) provides a schematic summary of the corporate engagement interventions by Solidaridad in landscape programming.

## 4.3.3 BUSINESS ACTORS

In landscape programming the variety of business actors include: farmers, small and medium sized enterprises (SMEs), service providers, domestic business, international supply chain actors and multinationals. Each of these enterprises - large and small - differs in their relation and dependency towards the landscape. For this wide diversity of private sector actors there are many factors which determine the current state of play in business

conduct and their degree of influence, which are relevant considerations for strategic corporate engagement, by Solidaridad directly or through the MSP. Three major factors to consider are: the individual company capacity (scale of operation, awareness on risks and impact, access to information, infrastructure and finance), the degree of organisation of private sector - among producers as well as in the supply chain or in the sector - and the (lack of) regulatory framework in the sector or production environment.

## 4.3.4 CORPORATE ENGAGEMENT

For private sector to become part of the solution, key ingredients are: intrinsic motivation, awareness about impact and enabling conditions to act - such as partnerships, (economic) incentives and (government) control measures. Three questions can

## NEW PERSPECTIVES ON THE ROLE OF BUSINESS ACTORS IN LANDSCAPES

### Entry points for private sector engagement:

- 1 Identify new markets to meet local needs,
- 2 Improve market linkages through supply chain connections and agreed quality standards of practices and products.
- 3 Explore business incentives for natural resource management and nature restoration.

### Considerations for private sector engagement:

- 1 Individual company capacity
- 2 Degree of organisation of private sector - among producers as well as in the supply chain or in the sector.
- 3 The (lack of) regulatory framework in the sector or jurisdiction.

help better understand the role of the private sector. First, is the business actor located in the landscape or connected from a distance? This will determine their commitment to the locality and their ability to think of long-term impact and investments. Second, is there awareness and understanding on how the business activity impacts and depends on the landscape? Building on the motivation to commit to and invest in a production landscape, understanding of ecosystem functions and interdependencies is essential to address both business and environmental risks. Thirdly, what is the business' interest to address negative impact and to find ways to contribute to positive impact? A company requires an economic return on their activity, which implies that intrinsic values are not enough. Economic gains as well as policy incentives and legal enforcement can compel business to contribute to a more sustainable economy.

### 4.3.5 FARMERS FIRST

In supply chains, at sector level and when taking a landscape approach Solidaridad puts farmers first. Producers are private sector actors and they are also the principal local stewards of natural resources. How they run their farm can either be a cycle of degradation or a cycle of regeneration. How do farmers understand the cause and consequence of environmental risks in their landscape? How are they affected and do they address risks? Research shows that farmers focus primarily on their individual farm and they prefer individual farm risk management with attention for the direct vicinity of the farm to address risks. A platform to connect with other land users is often lacking and these connections are not going to emerge naturally. This requires us to rethink the scale of area

management in how farmers can effectively address risks which require a collective response, such as deforestation, water management and climate change impact.<sup>10</sup>

### 4.3.6 BUSINESS: CLIMATE IS CHANGING

While corporate social responsibility used to be a plea to the moral responsibility of companies, today's global environmental challenges are at its best an opportunity to innovate and at its worst a matter of business survival. Whether or not companies understand and anticipate risks in the production landscapes they operate in will determine their ability to respond to future climate change impacts. The unpredictable nature of climate change, combining slow long-term trends (such as rising temperatures) and high impact shock events (extreme weather, flooding, droughts) call for strategic thinking and active response. Strategies for climate mitigation, adaptation and resilience require a landscape perspective and should become business as usual in corporate strategy and planning.

## TOOLS & GUIDELINES

- **Landscape Navigator:** Solidaridad developed The Landscape Navigator, an online engagement tool which invites professionals in the private sector to take a fresh look at the landscape in which their company operates. The questions trigger and inspire new ways of thinking about the sustainability challenges we face today and can help you identify the solutions of tomorrow. Together we explore how private sector can take a proactive role in addressing current as well as future risks and creating opportunities, which make business sense and make a positive contribution to people and the planet.

**TABLE 3:**  
**LIST OF LANDSCAPE PROGRAMMES WITH PRIORITY COMMODITY AND BUSINESS CATEGORY**

Country (landscape)	Commodity	Business category
Honduras	Oil palm, cocoa, tourism	Sector (national)
Nicaragua	Oil palm, cocoa, livestock	Sector (national)
Paraguay	Livestock	Smallholders, Sector (national)
Tanzania	Coffee, livestock, fruits	Smallholders, SMEs
Zambia	Sugar-cane, livestock, fruit & vegetables, aquaculture and fisheries	Smallholders, Sector (national)
India	Sugar-cane, leather	Smallholders, Small scale tanneries, Sector (regional)
Indonesia	Soy	Smallholders, SMEs, Sector (national)



**TEXT-BOX 3:  
NEW PERSPECTIVES ON THE ROLE OF  
BUSINESS IN LANDSCAPE**

**NEW BUSINESS OPPORTUNITIES AND MARKETS**

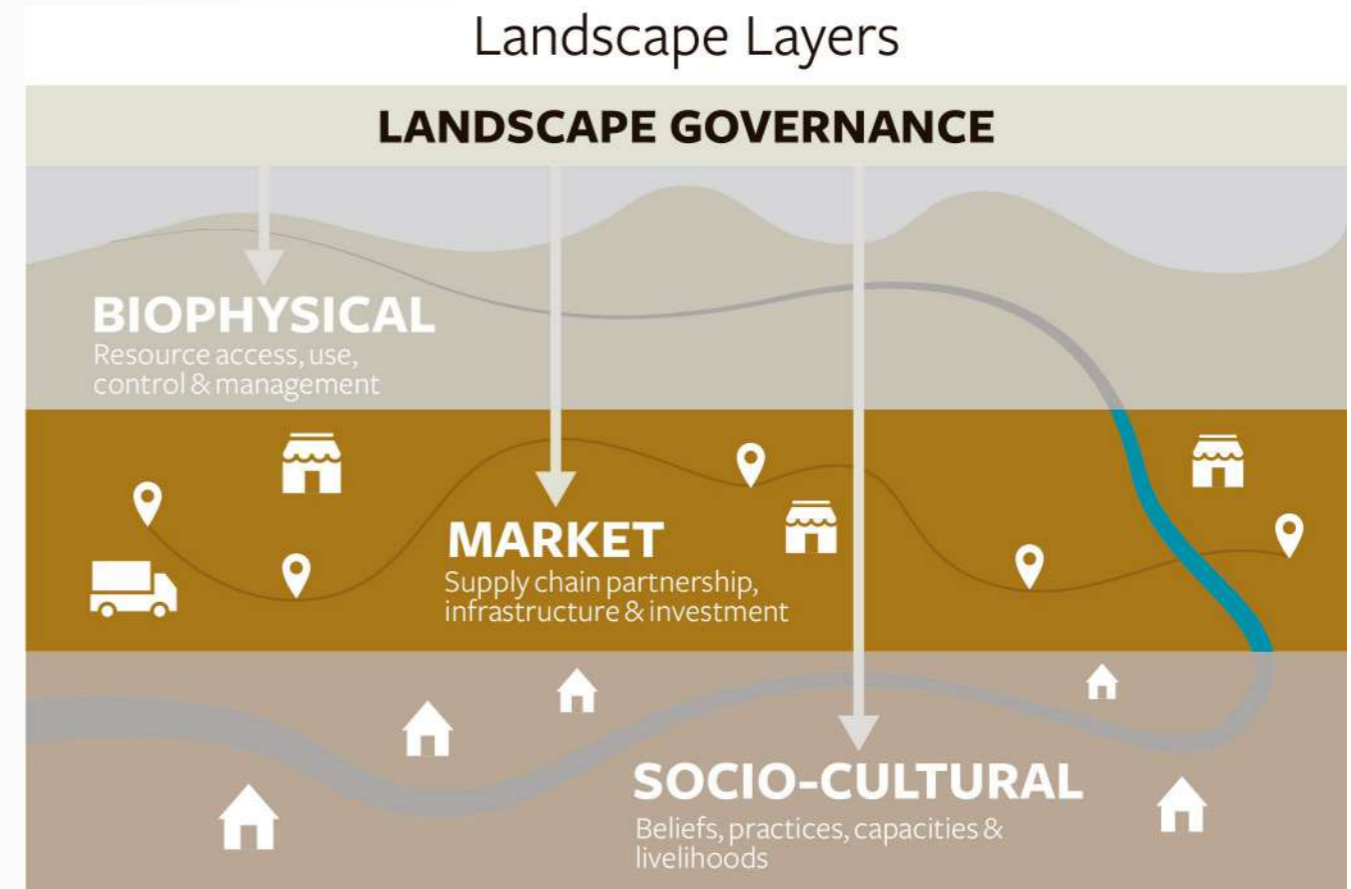
Based on identified needs Solidaridad kick-started pilot interventions in landscape programmes to set up new production models to address food security, quality feed for cattle, access to energy and building materials (Chaco, Paraguay: sesame supply chain, silage making; Kilimanjaro, Tanzania: set up of tree nurseries). In addition to meeting direct needs, diversification is a strategy to increase resilience at household level (less dependency on a single crop, diversifying income) as well as increased resilience in production itself (through inter-cropping and crop rotation). New business opportunities were identified to improve income and diversify livelihoods (PASOS Honduras and Nicaragua: agroforestry cocoa model; Merapi Landscape, Indonesia: introducing lemon and citronella grass farms for extraction of oil and honey bee farming). Lastly, valorisation of biomass streams at producer and processing level opens up opportunities to create products from waste, such as fertilizer, building or fibre materials, and bioenergy (PASOS Honduras: POME effluent treatment for energy).

**SUPPLY CHAIN PARTNERSHIPS AND MARKET LINKAGES**

Improving market linkages goes beyond operational logistics connecting producers to consumers. Supply chain connections are a precondition for cooperation and flow of information to improve product quality, production requirements and in the end producer value. A good example is the Mazabuka Landscape in Zambia, where pastoralist communities were trained in livestock management and at the same time they learnt about the cattle grading system by visiting the slaughterhouse. Translating the grading of live cattle to actual meat and hide quality has enabled pastoralist to make better decisions in both management and marketing their cattle (Mazabuka landscape, Zambia: cattle grading, market information). Another strategy to empower producers is through building processing capacity and enabling value addition. By organising processing capacity at the producer level, they gain control over product quality and value addition, strengthening their bargaining capacity and market position, as well as stimulating business spin-off opportunities (PASOS Honduras: chocolate making). Lastly, service provision is both a business opportunity as well as a need to deliver producer support and extension services. Within a landscape, service provision requires a sustainable business model to meet farmers needs and ensure continuation and innovation of extension support.

**NATURAL RESOURCE MANAGEMENT AND NATURE RESTORATION**

Economic activities which negatively affect ecosystems in the landscape are an entry point for change. The first step is to identify how producers can enhance natural resource management (NRM) such as land, soil, water and forest in their own practices. When producers understand and experience the short-term and long-term benefits of NRM that can be a strong incentive to change their practices. However, additional incentives and control structures need to be built in to prevent free-riders. The business case for restoration can either focus on-farm, through agroforestry or silvopastoral models (PASOS Nicaragua, Chaco Paraguay) or off-farm, such as restoration of riparian zone by tree planting and controlled sand mining to protect the river bedding (Mazabuka, Zambia). Lastly, accountability frameworks with clear guidance on waste water treatment, water use and land use are critical to support natural resource management in implementation, monitoring and enforcement. The Ganga Landscape programme in India addresses major water issues in both the sugar-cane sector as well as with leather tanneries. Water efficiency measures were coordinated from mill level in India by focusing on water saving practices in agricultural production. For the tannery sector, standards and monitoring protocols were developed and implemented in a participatory and step by step process to make sure SMEs were to able adjust their business operations and realise a reduction of point source pollution.



**Figure 2: Landscape Layers - Emphasis on Market**

Economic activities depend on and impact natural resources. The market can not be seen separate from the biophysical and socio-cultural layers in the landscape. That is why (landscape) governance is critical to clarify rights and responsibilities, to create a level playing field for business actors and ensure accountability mechanisms through aligned public and private governance arrangements.

**TABLE 4:  
SOLIDARIDAD CORPORATE ENGAGEMENT INTERVENTIONS IN  
LANDSCAPE PROGRAMMES**

Develop new business opportunities and markets	Invest in supply chain partnerships and market linkages	Improve Natural Resource Management and nature restoration
<b>Local Needs and Well-being</b> Meet stakeholder needs (food security, animal feed, energy, services etc.) and create local employment and income.	<b>Connect actors and markets</b> Enable supply chain connections and enhance market information to link producers to market.	<b>Producer incentives for NRM</b> Enable producers to improve land use practices to contribute to NRM and valorize benefits in quality product and ecosystem services.
<b>Diversification: livelihood and production model</b> Explore diversification of income and land use (for example through introducing new crops for inter-cropping/crop rotation).	<b>Value addition</b> Organise processing and value addition with producer groups and SMEs, both for local market and national/global market on agreed product and production quality criteria.	<b>Landscape investment in NRM</b> Develop the business case for regenerative production models and nature restoration at landscape scale.
<b>Bio-based economy</b> Identify opportunities for valorization of biomass, tapping into unused waste streams. This can help address pollution and meet local needs for among others. fertilizer and energy.	<b>Service providers for producer support</b> Organise service provision for producers through extension support to enable and scale best management practices and climate smart production.	<b>Accountability &amp; enforcement</b> Set up accountability framework to monitor and control resource governance, either by public sector or through supply chain/sector agreement.

# 4.3.1 NEW MARKETS FOR LOCAL NEEDS



## **Food security and climate resilience: Market opportunities for indigenous communities in Chaco - by Mario Salas, Chaco Landscape in Paraguay**

The Chaco Programme in Paraguay has implemented a model for agricultural development with indigenous communities to ensure food security and, at the same time, provide a source of income for the community during the dry season which can last for up to seven months."

## **PRIORITISE FOOD SECURITY AND INCOME GENERATION FOR LOCAL COMMUNITIES - MARIO SALAS**

Chaco is home to many native peoples of Paraguay. Traditionally, the villagers rely on the forest for honey, meat and caraguata, a plant from which they make fabrics. And while they keep a few sheep and goats, their food security is continually at risk because of the Chaco's extreme weather: droughts lasting up to seven months are followed by heavy rains. During the dry season it is impossible to grow anything and the community resorts to the forest to sustain itself. Low population density in the area is a reflection of the harsh conditions and government support is limited.

Solidaridad partners with Paraguay's Agriculture Technology Institute to provide technical training and extension support for indigenous communities, focusing on three goals: access to water, crops for consumption and crops to sell. The implementation of the following interventions combined build toward a climate-smart agricultural model at community level:

- Creating school orchards
- Creating community plots for self-consumption crops
- Growing sesame for income generation
- Improving the capture of rainwater.

School orchards are set up in eight communities to improve food security. These plots will provide food for around 800 families. All orchards have drip irrigation systems to avoid excessive use of water and provide fresh organic vegetables.

Capacity for rainwater catchments was increased among 434 families in the communities of El Estribo and Diez Leguas for both human and animal consumption. The project started two 18,000 m<sup>3</sup> water ponds to harvest rainwater, built in locations with good availability of clay to ensure rainwater will not leak away and a fence of woven wire to prevent entry of animals.

Thirdly, sesame is the identified cash crop commodity to create a source of income to invest in future agriculture and health care facilities for the community.

June 2018 was the first harvest of sesame crop and Solidaridad facilitated contact with ShiroSawa, a company dedicated to the export of sesame for the Japanese market, to buy the communities' crops. The revenues from sales amounted to 401 million guaraníes in the case of El Estribo (around USD 71,000). From these revenues, three million guaraníes were set aside as the community contribution for the next planting. The rest was distributed to buy food for the winter and clothes for the 263 producers and their families.

In December 2018 500 hectares were ready for planting sesame and 140 hectares were dedicated to production for family consumption. The community plots provide a broad harvest of sweet potatoes, beans, corn and squash, among others. In addition to ensuring the food security of the families, community plots allow for selling surplus as an alternative income source to sesame.

### **LESSON**

We need to pay more attention to direct needs of producers themselves and identify market opportunities based on direct needs with attention for climate adaptation and resilience.

### **RECOMMENDATION**

Food security includes both the availability of food as well as nutritional value. Diversification is a critical strategy to deal with climate risk and contributes to healthy diets by providing access to fresh and nutritious food.

## 4.3.2

# SUPPLY CHAIN CONNECTIONS & MARKET INFORMATION



### **Improving product quality and knowledge of market requirements go hand in hand: two examples on market linkages from Mazabuka Landscape, Zambia.**

Solidaridad supports interventions in multiple sectors in the Mazabuka Landscape in Zambia and for this case example organic vegetable production and livestock are highlighted.

## EMPOWER PRODUCERS WITH KNOWLEDGE ON BEST MANAGEMENT PRACTICES AND MARKET INTELLIGENCE

Solidaridad is promoting organic agriculture in fruit and vegetable production to contribute to sustainable land management and to meet growing local demand for quality fresh vegetables. Organic production reduces risk of misuse of agrochemicals which poses a direct threat to food safety and consumer health. This is one of the reasons for growing demand of organic produce in Zambia.

Main practices for organic production are centred around soil health through application of green manure instead of artificial fertilizers and pesticides as well as introducing a smart cropping system based on inter-cropping and rotation of crops. Crops commonly grown are cabbage, tomato, pumpkin, local eggplant, cucumber, oranges, bananas, onion and okra. Inter-cropping and crop rotation are critical to prevent pests and diseases. For example, a row of spring onions prevents pests hopping from plant to plant, and marigold can keep insects away and attract useful insects due to its pungent smell.

Apart from raising awareness and promoting organic production of vegetables, Solidaridad linked the producer clusters to the market. One example is the cafeteria of the nickel mine, which is now sourcing local organic produce and provides for 1000 miners. Another key market is the local supermarket in Mazabuka town, which sees a growing demand for high quality organic vegetable products among their customers. These market linkages give consumers access to healthy food and producers get a higher price for their organic produce compared to conventional produced crops.

The other case example relates to product requirements and market intelligence in the livestock sector where a key intervention by Solidaridad was to invite pastoralists to visit the slaughterhouse. Here they learned firsthand how the cattle grading translates into meat quality. In Zambia, the cattle grading system sets the price when cattle is sold to a

slaughterhouse. However, pastoral communities did not take this into account in their livestock management and market decisions. Keeping livestock is of high cultural value and traditional practices prevail over market opportunities.

The combination of training on livestock management, grassland management and exposure to market intelligence has helped them to produce better quality beef and to negotiate a good market price. Pastoralists now apply the cattle grading system through active monitoring of their cattle by using the cattle grading app. This app helps to classify the cattle size and condition through photo analysis and helps decide when a cow is ready to slaughter. The visit to the slaughterhouse enabled producers to understand the connection between grading the cow alive and how it translates into quality meat.

This knowledge about market requirements helps to change dominant cultural practices and communities realise that natural resource management can enhance their economic position. The next step is to encourage farmers to distinguish between a "cultural herd" and a market herd, and not sacrifice valuable cattle for weddings and funerals. In this way it is possible to respect traditional practices and professionalise livestock management.

### **LESSON**

The combination of knowledge on best management practices, access to technology and market intelligence empowers producers to enhance their economic position, by changing practices at home and negotiating better prices in the market.

### **RECOMMENDATION**

Connect supply chain partners through site-visits and create the opportunity to learn from each other's workplace reality. This type of exchange facilitates a powerful learning opportunity.

# 4.3.3 INCENTIVES FOR WORKING WITH NATURE



## ***Diversification and nature restoration: a business model for producers and sector level commitments for the landscape – by María Durán, PASOS RACCS, Nicaragua***

The rapid expansion of oil palm and livestock production systems are driving deforestation, accelerating environmental degradation and decreasing resilience to climate change in the South Caribbean Coast Autonomous Region (RACCS) of Nicaragua. The oil palm plantations are frequently established on exhausted livestock production areas. Both sectors of palm oil and livestock face the challenge to transform the current extensive production operations into a more sustainable, integrated and intensive system with increased productivity and reduced soil and climate impacts.

## **WITH SUPPORT AND INCENTIVES IN PLACE, PRODUCERS CAN LEAD THE WAY IN WORKING WITH NATURE**

In the PASOS RACCS landscape programme, Solidaridad and partners piloted several interventions to develop smallholder-inclusive business models, contributing to such diversification of production systems - including oil palm, cacao, livestock, and robusta coffee - and commit to protection of ecological functions at landscape level. The aim is to validate an inclusive smallholder business model for the oil palm sector, by establishing 200 ha of palm with 10 small producers as a pilot. The initial investment was made with own funds of the company San José and the smallholder producers themselves. This pilot showcases the potential of diversified production systems for oil palm and cacao agroforestry, livestock, basic grains and other crops to provide an alternative for extensive and aggressive industrial expansion of oil palm.

Farmer Field Schools provide training to achieve both vertical productivity and quality improvements in relation to integrated landscape management, specifically reforestation. Monthly workshops are held at model farms and farmers have adopted the best practices on a total of 876 hectares. A critical mass of producers participating in the Farm Field Schools was willing to reforest. Forestry supplies and guidance were provided by INAFOR. For livestock the practices include: establishment of improved grasses, division of pastures, electric fencing, use of multi-nutritional blocks and mineral salts as supplements to animal feed, improved animal health management, improved input use, abolishment of burning of pastures, and natural regeneration of pastures. For cocoa the practices include: pruning, management of pests and diseases, and soil conservation. With this approach results are achieved both on farm, enhancing production, as well as off-farm, reducing expansion of farm land into the forest and contributing to restoration.

While the business model has to work for producers, the sector has a role to play in coordinating at

landscape level. Solidaridad facilitated a national dialogue titled “Livestock growth with zero deforestation”. An action plan was drawn up to stop the degradation of primary forest ecosystems, diversify livestock farms by reducing vulnerability to climate change, creating alliances with other sectors (such as oil palm and cocoa) focused on conservation and making relevant proposals to finance the change of the national livestock system towards a more sustainable approach.

The initiative was also joined by the Eco.Business Fund, an investment fund created by KfW together with International Conservation and Finance in Motion. The fund focuses on promoting business and consumer practices that contribute to the conservation of biodiversity, the sustainable use of natural resources, the mitigation of climate change and the adaptation to its impacts, by providing financing and technical assistance to financial institutions and companies committed to environmental practices in unique ecological environments. Financial requirements are now set in place to encourage the transition towards sustainable livestock production.

### **LESSON**

PASOS enabled collaboration between producers, cooperatives and the National Forest Agency INAFOR to jointly realise reforestation goals within the national reforestation programme. With support and incentives in place, producers can lead the way in working with nature.

### **RECOMMENDATION**

Diversify production systems with attention for ecosystems and nature restoration, because it results in business models that work for producers and have a positive impact on the environment.

# 4.4 LANDSCAPE GOVERNANCE



How does the MSP contribute to Landscape Governance? What interventions or new governance arrangements enhance natural resource management in the landscape?

## 4.4.1 DEFINITION AND RELEVANCE

The concept of landscape governance is defined as follows: “the set of rules and decision-making processes of public, private and civic sector actors with stakes in the landscape that affect decisions in the landscape”. Landscape governance relates to how decision making addresses overlapping claims and conflicting interests in the landscape. It also relates to how these rules encourage synergies among stakeholders and stimulate the sustainable management of the landscape.<sup>12</sup>

In short, governance relates to the process of interaction and decision making among the actors involved in a collective problem that lead to the creation, reinforcement or reproduction of social norms and institutions. We acknowledge the broad definition of governance, which comprises of all the

## EFFECTIVE GOVERNANCE IS CRITICAL FOR EQUITABLE AND INCLUSIVE DEVELOPMENT IN SUSTAINABLE LANDSCAPES.

processes of governing – whether undertaken by the government of state, by a market or by a network and whether through laws, norms, power or language.<sup>13</sup> Landscape governance relates to the dynamics of governance within the selected geographic demarcated area as defined by the stakeholders and also includes actors outside of the landscape which affect the landscape through policies, market linkages or other connections or influence.

### 4.4.2 GOVERNANCE UNPACKED

Effective governance is critical for equitable and inclusive development in sustainable landscapes. Solidaridad aims to contribute to an enabling policy environment for sustainable landscape management, with specific attention to the institutional and human capacities to design, improve and implement such

policies. Other interventions are geared to design and co-create governance arrangements, which are mechanisms to incentivise, enable and enforce compliance with rules and best practices to ensure sustainable land use and maintain and protect ecosystems functions.

For Solidaridad inclusion and participation in shaping these policies, capacities and governance arrangements are critical principles to ensure barriers are understood and addressed effectively and equitably. Our scope of work extends from bottom up community engagement to top down policy dialogues and planning at regional or national level. In this way we connect the policy reality on paper with the local reality in practice as faced by farmers, communities, business and local government. Three case examples at the end of this chapter illustrate our experience with landscape governance in practice.

## PRINCIPLES AND PRACTICES OF LANDSCAPE GOVERNANCE

### Guiding principles for rethinking governance:

- 1 Think not only about the form of institutions, but also about their functions.
- 2 Think not only about capacity building, but also about power asymmetries.
- 3 Think not only about the rule of law, but also about the role of law.

### Lessons from practice:

- 1 The MSP can initiate and scale governance arrangements regarding land and resource use.
- 2 Co-creation of governance arrangements is key to understand barriers and incentives
- 3 Participatory monitoring is necessary to adapt and improve governance over time.



### 4.4.3 RETHINKING GOVERNANCE FOR DEVELOPMENT

Ineffective policies can persist, while potentially effective policies are often not adopted. The “World Development Report 2017: Governance and the Law” unravelled why some policies fail to achieve desired outcomes and what makes other policies work.<sup>14</sup> Main conclusions are:

- Successful reforms are not just about “best practice.” To be effective, policies must guarantee credible commitment, support coordination, and promote cooperation.
- Power asymmetries can undermine policy effectiveness. The unequal distribution of power in the policy arena can lead to exclusion, capture, and clientelism.
- Change is possible. Elites, citizens, and international actors can promote change by shifting incentives, reshaping preferences and beliefs, and enhancing the contestability of the decision making process.

Three guiding principles for rethinking governance for development were formulated:

- Think not only about the form of institutions, but also about their functions.
- Think not only about capacity building, but also about power asymmetries.
- Think not only about the rule of law, but also about the role of law.

### 4.4.4 THE ROLE OF MSP: SHAPING LANDSCAPE GOVERNANCE

The landscape approach is in its core a process to shape and design governance, working with the institutions, capacities and the rule of law. The MSP is an inclusive and participatory process in which stakeholders of place and stakeholders of interest jointly determine the values in the landscape which they agree to protect, maintain or restore. Once these values are made explicit and agreed, there is need for an actionable framework of rules and responsibilities. The MSP can formulate and design innovative local governance arrangements regarding land and resource use. Moreover, an MSP can support copying and scaling of successful governance arrangements across the landscape or even in other jurisdictions.

### 4.4.5 EXTERNAL EVIDENCE

How we understand and define the governance system which shapes today’s institutions, rules and norms in our society, informs how we view respective roles and responsibilities of government, private sector, civil society and local communities in shaping governance and through which mechanisms actors can hold each other accountable. The typology of governance by Bednar & Henstra, as presented in table 5 on the next page, provides an introduction of modes of governance which explain how each actor’s role and influence differs in each mode.<sup>15</sup> At the core of any mode of governance is the role of the state, as suggested by Pierre (2000), so the typology uses the relationship between actors and instruments to the state as a key metric of classification, recognising that the state always maintains its monopoly on the use of force.<sup>16</sup> The typology outlines the governance modes as ideal types, whereas in practice elements from more than one is typically present, and this mixing is often the source of both governance effectiveness and failure.<sup>17</sup>

The literature concludes that “actors who promote the use of regulation or legislation are advancing ideals consistent with hierarchical governance”. However, Fleming and Rhodes (2005) argued that: “the future will not lie with either markets, or hierarchies or networks but all three. The trick will not be to manage contracts or steer networks but to mix the three systems effectively when they conflict with and undermine one another”.<sup>18</sup> This mixing may ultimately be a role for governments, which are uniquely equipped with the authority, legitimacy, and resources to combine aspects of these governance modes. Recognising the strengths and weaknesses that each mode embodies is a critical first step.

### 4.4.6 GOVERNANCE: MORE THAN POLICIES

Throughout implementation of the landscape programmes, this broader understanding of landscape governance took form as defined above. In addition to a narrow (state-oriented) policy focus, landscape governance includes different modes of governance: network-driven through the MSP, market-led through supply chain relations and

## THE PROCESS OF SHAPING EFFECTIVE GOVERNANCE STARTS WITH IDENTIFICATION AND UNDERSTANDING OF THE PROBLEM TOGETHER WITH STAKEHOLDERS

community-driven initiatives on models and practices for land and resource use. Instead of drafting top-down laws and policies as solutions for sustainability, the process of shaping effective governance starts with identification and understanding of the problem within the context of place by stakeholders themselves. Furthermore, it is important to include different perspectives and to acknowledge challenges and (perverse) incentives that explain the status quo.

A very important aspect in this process is the use of language. For example “illegality”, “trespassing”, “encroaching”, “polluting” or “degrading” have the power to label certain actors as perpetrators which does not help to investigate whether the situation is fair and realistic. A multi-actor understanding of identified problems, allows for exploring effective incentives and a support framework for producers and communities to manage natural resources, which

is critical to operationalise (environmental) policies in practices. By looking for the entry point through motivation and buy in, based on awareness, understanding and incentives, chances for success are higher compared to focusing on only control measures and enforcement.

**TABLE 5:  
TYPOLOGY OF MODES OF GOVERNANCE**

Source: Bednar & Henstra (2018)<sup>19</sup>

	Hierarchy	Market	Network	Community
<b>Direction of authority</b>	Top-down	Circular (supply and demand)	Horizontal	Bottom-up
<b>Initiating and implementing actors</b>	Federal, regional and local governments	Government and market actors	Government, private sector, and non-governmental experts	Citizens, community groups, neighbourhood associations
<b>Dominant policy instruments</b>	Legislation and regulation	Supply and demand; government market intervention	Negotiated agreements, codes of practice, voluntary programmes	Self-regulation, voluntary participation

# 7 BARRIERS FOR EFFECTIVE RULES AND POLICIES



There are many ways in which landscape governance falls short. Policies are either not in place, weak or conflicting, or simply unknown. Institutions often lack the capacity, incentives or means to implement and enforce policies. Rules, laws and policies may be in place, but they are not always known, respected or enforced.

To contribute to landscape governance it is important to reflect on what conditions make rules, laws and policies effective. As explained above, the process of shaping effective governance arrangements builds on shared understanding and agreement of the problem. The steps presented here follow a logical order and show what needs to be in place to enable compliance with rules and allow for effective policies.

Following the steps can function as a checklist to see what is missing or not working (yet)!

## 1 RULES AND POLICIES DO NOT EXIST

Rules and policies need to exist to be effective. Sometimes more generic policies cover specific problems. It is key that rules and policies are explicit and clearly formulated in relation to the specific issues they aim to address.

## 2 RULES AND POLICIES ARE NOT KNOWN BY RELEVANT ACTORS

Policies are passive on paper. They need to be actively communicated and shared, in relevant language and format to targeted audiences.

## 3 RULES AND POLICIES ARE NOT UNDERSTOOD

Communication and sharing does not guarantee understanding and acceptance. Some form of dialogue, education and training is required to make people aware of their rights and responsibilities. This is part of building capacity both at the side of institutions as well as targeted stakeholders.

## 4 RULES AND POLICIES DO NOT MAKE SENSE AND ARE NOT ACCEPTED

If rules and policies are known and understood, but don't make sense to the people who need to act on it, or if they are not accepted because they were not part of the process, or do not accept the legislative authority, this is a barrier for effective governance.

## 5 RULES AND POLICIES CANNOT BE ACTED UPON

For rules and policies to be effective, people need to have the capacity (knowledge, skills, and means) to act. This can relate to the individual level, for example mastering certain skills in good agricultural practices, or at group level, for example to collectively organise water management. The needs to be able to act will differ per context and relate to level of education, level of organisation and access to finance.

## 6 RULES AND POLICIES ARE NOT MONITORED TO ASSESS AND STEER EFFECTIVENESS

Whether or not designed rules and policies are actually addressing the original problem (such as preventing deforestation or pollution) needs to be assessed over time. What works and what does not work? This is part of enforcement (control), but also aims to learn for sake of improvement. Monitoring should allow for feedback from stakeholders, finding ways to resolve gaps and weaknesses in the governance arrangement for example by investing in capacities or improving incentives.

## 7 RULES AND POLICIES ARE NOT ENFORCED

Clarity on rights and responsibilities through rules and policies needs to be complemented by accountability holders. This can be a system or actor to ensure that rules are complied with, by means of controls or monitoring. This can be linked to a reward – incentivising the behaviour – or a penalty – like a fine or a warning.

### TOOLS & GUIDELINES

- [Landscape Governance Assessment Tool](#)
- Internal Solidaridad Workshop Report: Participatory Governance Assessment in Kilimanjaro Landscape, Tanzania (2019)

# 4.4.1. PARTICIPATION EMPOWERS POLICIES



## **Addressing forest degradation through community forest management – by Maria Sengelela, Kilimanjaro Landscape in Tanzania.**

The Kilimanjaro National Park is surrounded by 88 villages. Communities rely on access to the forest for firewood, building material, grazing and collecting food and plants. The Kilimanjaro National Park Authority (KINAPA) is struggling to curtail community use of forest in the rapidly degrading buffer zone. In a five year transition period, KINAPA seeks to limit and restrict community access with land use zoning policy, distinguishing three zones: first, the National Park, second, the forest reserve, and third, the buffer zone, in which some activities are allowed; such as collection of forest soil, firewood and building materials. Communities have to prepare for zero-access in the near future, but this change in policy is not accepted among the people because their livelihoods depend on the forest.

Solidaridad piloted the Landscape Governance Assessment Tool, which is a participatory assessment methodology to jointly identify gaps or bottlenecks which inhibit effective governance in practice. In this case, KINAPA, pastoralists, community representatives and government extension staff jointly discussed the challenges around forest protection, resource management and access to the buffer zone for livelihood needs. The discussions brought forward a range of insights.

First of all, it became clear that it is mostly women who are burdened with the task to collect firewood, water, building material and provision of food. It is women who suffer directly from the degradation of forest resources as it takes more time and effort, even becomes unsafe, to go deep into the forest. Out of necessity to provide for their families, they play a key role in encroaching and degrading the buffer zone. Despite their important role in this issue, women are not represented in village environmental committees or other local institutions, which are traditionally dominated by men.

While the functioning of these local institutions such as the village council, village environmental committees and local by-laws were criticised for ineffectiveness due to corruption, low capacity or lack of accountability structures among kin, there was a call for action to invest in these potential solutions. Key suggestions were to develop by-laws in a participatory way, which allows for more specific interpretation of national policies to fit the local context. By-laws can specify what resource use is allowed (extraction of forest topsoil) and not allowed (felling of trees). Also clear demarcation and signposts to communicate these rules is required. Beyond the village level, participatory forest management was proposed as an alternative to top-down national forest authority, so communities share responsibility in maintaining and protecting the forest.

These discussions informed Solidaridad interventions. The critical issue of forest degradation and deforestation reconfirmed the necessity of the pilots initiated introducing agroforestry production systems and tree nurseries, so these activities were scaled up. In Enduimet, Solidaridad initiated a

partnership with the Pastoral Women Council, given the critical role of women in harvesting wood from the forest. This CSO is implementing a model to help women establish their own community forest with indigenous trees as well as developing income generating activities by managing the forest and organising recreational activities in the forest.

Lastly, insights on landscape governance informed our strategies how to address land degradation at community level. With attention for drivers behind degradation of land and forest and the specific role and needs of community members – women, men, youth as well as the village leadership. This inspired a range of initiatives, for example the formation of a youth group in Olmolog to make briquettes as an alternative source of energy and extra income, who were supported with a briquette making machine; the introduction of bee-keeping and investments in apiaries to serve both income generation and conservation on community lands; and actual establishment of community forests in selected areas - either highly degraded land in need of restoration or land with high conservation value in need of protection. The end goal is to reduce deforestation and encroachment to forest reserves and reduce human-wildlife conflicts, while creating viable livelihood opportunities in harmony with the environment.

## **LESSON**

Cultural practices and community needs have to be addressed in land and resource governance to ensure ownership and accountability.

## **RECOMMENDATION**

Existing tools such as the [Landscape Governance Assessment Tool](#) developed by Tropenbos International are valuable resources, which help translate abstract concepts to valuable interactive discussions and stakeholder engagement.

### *Further reading:*

Graaf, de M. et al (2017) “Manual - Assessing Landscape Governance: A participatory approach” by Tropenbos International and EcoAgriculture Partners

## 4.4.2 INSTITUTIONAL CAPACITY & POLICY GAPS



### ***Institutional Bricolage: Filling institutional gaps with coordinated stakeholder initiatives – By Conor Dolan, Water Governance Expert in Mazabuka Landscape, Zambia***

In partnership with the Water Resource Management Authority (WARMA) Solidaridad conducted a catchment assessment to understand the current status of water abstraction and distribution in the Kaleya catchment. Such assessment informs the development of a Catchment Management Plan and provides clarity on water allocation to prevent conflicting claims. Furthermore, this catchment assessment directly informs the formation of water users associations. The partnership with WARMA revealed institutional challenges which hampered progress in improving water management in the landscape.

Solidaridad supported WARMA to execute a hydrological assessment in a river catchment that suffered from severe water abstraction conflicts due to poorly regulated dams that were constructed in the past. The hydrological assessment advanced the mission to resolve the conflicts and was a step forward to forming the Water User Association (WUA). Solidaridad supported WARMA to conduct the initial engagements with large and small-scale farmers in the catchment and formed the interim committee of the WUA. However, a major policy gap that prevented WUA establishment was the formulation of the Statutory Instruments (SIs) that legally authorise a WUA as an entity. WARMA intentionally postponed the formulation of the SIs and redirected their strategy away from decentralised governance structures (WUAs). Their new focus was on revenue generation through allocation of groundwater permits. Revenue generation became important because otherwise WARMA would become too dependent on the national treasury, even with the support of international donor funding.

For a number of years, WARMA had established a fully operational office in Mazabuka, to oversee the management of the Lower Kafue Sub Catchment. While the office was financially supported by external donor funding from GIZ, WARMA senior management determined the arrangement to be infeasible due to the high operational costs. In early 2020 the office relocated from Mazabuka back to the capital city of Lusaka. The loss of the WARMA team meant that Solidaridad could no longer partner with or support WARMA with the implementation of catchment protection interventions and could not continue the establishment of the WUA. In the neighbouring Magoye river catchment, the WUA establishment process (supported by GIZ) was also halted.

The institutional challenges presented above illustrate the wider held critique against Integrated Water Resource Management (IWRM) as a feasible approach to governance when institutional capacities are low. The promotion of decentralised structures – in this case WUAs – for resource management is considered ‘copy and pasted’ from generally ‘Western’ contexts that have sufficient institutional and financial capacity to realise and sustain such governance arrangements. In African contexts however, that capacity may not

always exist and can become difficult to sustain. When scrutinised according to Ostrom’s principles<sup>20</sup> e.g. capacity to monitor the resource, WUAs in Zambia and other developing nations in Africa may not qualify due to the lack of sufficient water monitoring infrastructure and the inability to implement appropriate sanctions.

Solidaridad’s Multi-stakeholder Platform, which straddled the two river catchments Kaleya and Magoye (both lacking a functional WUA), in many ways filled the void where a platform was needed to discuss water issues. The MSP served to cover issues such as water pollution, sand mining and river restoration and gave rise to fruitful intervention outcomes. An advantage of the MSP is that it is easy, quick and cheap to convene, without need for authorisation from a government department, and in a number of ways performs some critical functions identical to a WUA. The MSP cannot replace the role of institutions or resolve the capacity gaps, but the platform does allow for stakeholder agency and creative solutions to adapt and move forward – despite institutional challenges.

### **LESSON**

Institutional challenges at national level can inhibit necessary investment in local governance arrangements and stall progress in establishing decentralized management structures.

### **RECOMMENDATION**

Partnerships with national authorities remain critical in landscape programmes, because of the central coordinating role of the state. However, when these institutions inhibit change or slow down progress, institutional bricolage can fuel agency of stakeholders by implementing concrete interventions and showcase solutions.

# 4.4.3 ZERO- DEFORESTATION COMMITMENT



**Voluntary private sector standards can drive positive change in landscape governance, through incentives and accountability structures. – PASOS, Zona Litoral del Norte in Honduras.**

On 10 July 2019 government agencies, private and social companies, Solidaridad, and other civil society organisations (CSOs) signed a zero-deforestation agreement with the palm oil sector.<sup>21</sup> This is the first Zero Deforestation Declaration of Mesoamerica and signed by 100% of the palm oil sector, local CSOs, and national-level government actors. The agreement rapidly moved into validation with an agreed action plan for monitoring and scaling up. The aim is to restore and protect vulnerable ecosystems and biodiversity, such as the Mesoamerican Reef and protected areas, while increasing sustainable production and ensuring market uptake.

## A SMART MIX OF GOVERNANCE ARRANGEMENTS CAN DRIVE COLLECTIVE ACTION AT LANDSCAPE LEVEL.

The zero-deforestation agreement is the result of public-private negotiation led by Solidaridad to help producers, traders and buyers to fulfill their commitments to deforestation-free supply chains. It also aims to support the Government of Honduras to facilitate better growth through sustainable rural development in partnership with civil society.

Since 2012, Solidaridad has been actively supporting the oil palm sector in Honduras in working towards sustainable production according to the Round table on Sustainable Palm Oil standard. In 2017, this effort scaled from a farm or processing-plant focus to a landscape-level approach because of the inclusive nature of the agricultural economy in the sector. Solidaridad created the Sustainable Landscapes Programme (Paisajes Sostenibles - PASOS) to continue facilitating dialogue in the region, building consensus between farmers, social enterprises, and private companies – and now also including municipal leaders, water councils, tourism boards, environmental associations, cacao producers, and many other stakeholders, to find solutions at the broader landscape level that benefit all.

The oil palm sector in Honduras has become a regional leader, bringing to the dialogue other commodity sectors and stakeholders across the country. Leading up to this commitment, the Landscape Scenario Modelling exercise informed the development of sector-wide sustainability positions and policy recommendations (see case study 4.2.3 on page 48-49). An extensive process of mapping improved spatial planning for responsible expansion of oil palm plantations, including the promotion of agroforestry and diverse production systems, restoration of degraded and vulnerable areas, and biodiversity enhancement. Underlying these interventions is the MSP as catalyst for partnership, where private sector, government, communities, local CSOs, special interest and research groups engage in dialogue, conflict resolution, lobbying and advocacy.

This zero-deforestation commitment is a powerful example which shows how private sector ambitions towards sustainable practices can drive landscape governance towards positive impact. Considering the broad range of signatories, it is clear that zero-deforestation is a shared responsibility for both public and private sector. The signatories of the agreement pledged to participate with individual and joint actions to avoid tropical deforestation. This includes the implementation of a monitoring protocol provided by the Honduran National Institute for Forest Conservation and Development, Protected Areas and Wildlife (ICF). All signatories are being trained by ICF to use the monitoring protocol and communication system. The aim is to make the process transparent and set a foundation for the remediation and compensation mechanisms for the restoration of oil palm growing areas and forests.

### LESSON

Voluntary Sustainability Standards and sector level commitments add to the smart mix of governance arrangements and can drive change for collective action at landscape level.

### RECOMMENDATION

Building on commodity expertise and an extensive network in commodity sectors, Solidaridad is uniquely positioned to connect sector level initiatives in the landscape and coordinate commitments to strengthen landscape governance. Strategic identification of such opportunities for scaling impact across sectors should be a priority for future programming.

# 4.5 LANDSCAPE FINANCE



How can we finance sustainable farm practices, responsible business conduct and landscape level solutions? What are efficient and effective ways to jointly identify and design investment opportunities with positive landscape impact?

## 4.5.1 DEFINITION AND RELEVANCE

Landscape finance refers to the necessary investment to take a landscape approach which results in financial mechanisms that achieve positive social, environmental and economic impact. Therefore landscape finance is a broad concept, including the existing financial flows in the landscape economy, as well as the (temporary) financial means for a landscape programme intervention and the (untapped) future capital to realise desired investments for landscape solutions. Understanding financial flows within the landscape is critical to identify gaps and needs for further coordination. It is important to note that existing financial flows and mechanisms can be the driver behind unsustainable practices, uncontrolled expansion and resource extraction with detrimental impact on people and nature.

## ORGANISING FINANCING FOR INTEGRATED LANDSCAPE INVESTMENTS REQUIRES DIFFERENT STRATEGIES AND TOOLS THAN INVESTMENT IN A SINGLE SUPPLY CHAIN, COMMODITY OR ASSET

### 4.5.2 FINANCE AT THREE LEVELS

In Solidaridad landscape programmes there are three central elements in working with landscape finance. At *producer level*, financial literacy and access to finance are prioritised to ensure that farmers and farmer organisations are able to professionalise their business and make necessary investments for the future (such as climate adaptation). At *MSP level*, the enabling funds for programme implementation allow for the coordination of stakeholders. Engagement of

the financial sector in this stakeholder dialogue is critical in addressing finance gaps and investment needs. In addition, the MSP channels seed money to kick-start pilots and support identification of business models. Lastly, at *landscape level*, the development of a landscape investment framework and generating a pipeline of investment opportunities to scale landscape solutions is a third element. The short-term enabling finance for programme interventions can then be matched with long-term public and private funds willing to invest in a sustainable future.

## PRINCIPLES AND PRACTICES OF LANDSCAPE FINANCE

### Enabling conditions for landscape finance:

- 1 **Financial Sector:** a well-functioning local financial sector that can help assess the risks of the investments and efficiently mobilise funds to activities and actors.
- 2 **Financial Governance:** procedures and scrutiny that ensure alignment with legal regulations as well as clear requirements to safeguard agreed landscape values.
- 3 **Accountability & Trust:** an open dialogue about risk perception between stakeholders involved can help build trust and mitigate risks in the design of finance solutions.

### Solidaridad addresses landscape finance at three levels:

- 1 **Producer level:** Invest in financial literacy and validate producer business cases to get access to finance.
- 2 **MSP level:** Coordinate stakeholder analysis of finance gaps and investment needs, followed by smart selection of pilots testing landscape solutions for future investment.
- 3 **Landscape level:** Develop a landscape investment framework and generate a pipeline of investment opportunities, matching public and private funds.

### 4.5.3 LANDSCAPE FINANCE CHALLENGES

Organisations leading in the field of landscape finance such as IUCN, EcoAgriculture Partners, Tropenbos and WWF Landscape Finance Lab have identified a number of major challenges which point out the barriers that inhibit effective landscape finance to date. The publication Landscape Assessment of Financial Flows<sup>22</sup> highlights the following:

- **AVAILABILITY** Finance for unsustainable activities is more widely available compared to finance for sustainable activities. Moreover, as pointed out by Reed (2000),<sup>23</sup> there is a substantial gap between the current finance invested in the climate and sustainable development agendas and the perceived amount required to actually deliver on ambitions – especially private sector is not yet bearing substantial weight in closing this gap.
- **LANDSCAPE CONTEXT** Most investors – private, public or civic – are not investing with a landscape context or landscape goals in mind but rather focus on a single objective, such as agricultural production, ecosystem health, forest restoration, or climate change adaptation or mitigation (without attention for trade-offs).
- **COORDINATION** There are few efforts to coordinate finance within landscapes — to address interdependencies, conflicts, spatial connectivity, or the synergies needed to achieve landscape ambitions at scale.
- **CONNECTION** There is a general mismatch between available funding and landscape initiatives: investors seeking landscape investments perceive a lack of projects worth investing in, while ideas generated from landscape partnerships struggle to find sources of financing for their integrated activities.

### 4.5.4 ENABLING CONDITIONS

With the challenges laid out, what are the factors that contribute to making finance work for landscapes? Without delving into the technical details of specific blended finance instruments, instead we highlight the enabling conditions which have the power to make such mechanisms function. In line with the Landscape

Assessment of Financial Flows two conditions stand out: The first condition is “a well-functioning local financial sector that can help assess the risks of the investments and efficiently mobilise funds to activities and actors that contribute to the goals of the landscape stakeholders. The financial sector usually consists of formal and informal institutions, from banks and companies across the supply chain to members of social networks and family members”.

The second condition is financial governance, which refers to “the procedures and scrutiny that ensure that financial flows are aligned with legal regulations and the overall goals of governance in a given place”.<sup>24</sup>

Financing or investment requirements should include clear guidance on agreed values in the landscape, as well as accompanying monitoring and accountability frameworks to safeguard these values. Lastly, an overarching enabling condition is stakeholder coordination and building trust in relationships. When operational and financial risks faced by different stakeholders involved are openly addressed in dialogue, these risks can be mitigated in the design of finance solutions. While an investor perceives investment risk because of untested models or lack of capacity of the actors involved, a producer faces direct risks such as harvest failure, extreme weather or volatile market prices. There are many types of risk that challenge the success of financial mechanisms in landscape finance, which can be taken up and accounted for if stakeholders commit to working together – with the aim of making finance work for the landscape instead of the other way around.



### TOOLS & GUIDELINES

- [Landscape Investment and Finance Toolkit \(LIFT\)](#)  
Together with IUCN NL, EcoAgriculture Partners developed the Landscape Investment and Finance Toolkit (LIFT). Solidaridad piloted this Toolkit in Honduras, which resulted in the development of MESA, an integrated landscape management strategy, driving the development of business models for landscape transformation.

*LIFT helps landscape partnerships, project developers and potential investors address the complexity of landscape-level efforts so that they can benefit from successful integrated landscape investments. LIFT supports landscape partnerships to analyse their financing needs, strengthen business ideas, identify potential sources of finance, and develop successful strategies to secure this funding.*

- [Landscape Assessment of Financial Flows \(LAFF\)](#)  
Building on LIFT, Tropenbos International and EcoAgriculture Partners have partnered to develop the Landscape Assessment of Financial Flows (LAFF) methodology. It helps landscape actors identify sources of finance for new investment ideas, find the current financial flows that are most in need of transformation, and/or better understand the elements of a landscape’s financial context that require support.

Both resources are available online and in the Solidaridad Landscape Toolbox.

# 4.5.1 ACCESS TO FINANCE



**Structural solutions and agile emergency response: access to finance at producer level for investments in climate smart practices and direct relief when disaster strikes – Chaco Landscape, Paraguay**

Extension support combined with smart monitoring of farm practices and financial literacy training resulted in professionalising of dairy farming and a proven climate smart business model with significant improvements in productivity increase and GHG emission reduction (see chapter 4.2).

## SMART MONITORING CAN VALIDATE PERFORMANCE AND HELPS BUILD TRUST IN CO-DESIGNING CLIMATE FINANCE SOLUTIONS.

The evidence for the climate smart business model enabled dairy producers to get access to credit. Producers could show a strong track record in farm administration when liaising directly with local financial sector. At the same time, the conditions to access finance are based on low carbon emission requirements and the monitoring framework which the cooperatives invested in functions as an accountability tool for the bank to keep track of results, in addition to their financial return on investment.

Apart from this positive example of gaining access to finance, producers in the Chaco landscape still face high climate risks and have dealt with consecutive long period of droughts and severe flooding over the past years. Risk mitigation is difficult because agricultural insurances are exceedingly expensive and preventative measures such as dikes and channels are not effective against the intensity of rain.

What is required is an effective emergency response in times of flooding. The MSP proved able to respond directly to urgent needs resulting from the impact of extreme weather events by taking the lead in infrastructure works to clear flooded roads and providing supplies to replace crops damaged by floods or droughts. Finance institutions developed ready-to-go credits for smallscale farmers to fight the weeds that would appear after the floods, to enable them to re-sow lost pastures and to allow for direct purchase of animal fodder.

In addition to these climate shocks, when the Covid-19 pandemic hit in 2020 this resulted in a mandatory

lock-down in Paraguay. Indigenous people in Central Chaco were unable to work or buy food outside their communities, leaving them without an income and without food. Due to the lock-down, the communities found themselves unable to harvest, as they needed to receive special inputs to store the grain for drying. On the other hand, in this situation, they could not leave to work in other neighbouring establishments as day labourers either. While the national government struggled to bring food to these communities, the MSP made an upfront investment in April to deliver food batches to 17 villages in the indigenous communities of El Estribo and Diez Leguas, until government supplies arrived.<sup>25</sup>

### LESSON

Access to finance is a catalyst for change and triggers an upward cycle for improved performance on farm. Smart monitoring can validate performance and helps build trust in co-designing climate finance solutions.

### RECOMMENDATION

Structural solutions are necessary to solve access to finance challenges at producer level. At the same time agile emergency response mechanisms – as facilitated by the MSP partnership - are required to alleviate direct needs and act in solidarity.



## 4.5.2 ENABLING FINANCE



### **Leverage stakeholder capacities through MSP coordination**

The value of coordination among stakeholders in a multi-stakeholder platform has been touched on in the earlier chapter on MSPs. Also in the previous case study it is clear that the MSP can assist and support in providing access to finance. To emphasise the role of the MSP in coordinating enabling finance in the landscape, two more examples are presented.

## **WITHIN THE MSP, STAKEHOLDERS CAN IDENTIFY FINANCE GAPS AND OPPORTUNITIES, AND THEN COORDINATE AND MOBILIZE RESOURCES TOGETHER.**

In the Mazabuka landscape, the role of technical working groups within the MSP was instrumental for action planning and implementation of pilot activities in aquaculture, fisheries and riverbank restoration. The technical working groups did not only allow for prioritising issues and action planning for solutions but they coordinated the mobilisation of human capacity, technical expertise and financial resources in an effective and efficient way.

By taking locally available resources as a starting point, proposed solutions enhanced self-sufficiency of actors and solutions were designed for lasting impact. For example, the formation of Village Fisheries Management Committees was part of a holistic approach to sensitise communities on the purpose of the seasonal fish ban, introduce registering and licensing of fishermen and set up a monitoring system of village river patrols in close collaboration with government officials. These relatively low-cost interventions and procedures were initiated and funded by the technical working group and can be continued with lasting commitment from stakeholders involved.

In the Chaco landscape in Paraguay, the multi-stakeholder platform has proven to be a pivotal mechanism in bringing together producers, communities, private partners and public service providers to commit to a shared agenda addressing issues in the landscape. The agenda provided a roadmap and went hand in hand with the introduction of investment consortia which aimed to increase available resources and speed up emergency response in dealing with extreme climate events.

For each issue identified, the MSP suggested a solution, determined its costs and coordinated what each stakeholder would contribute, either in kind or in cash. For example, if one party provided machinery,

the other one would provide labour, and yet another the fuel for the machinery. This way, the so called “beneficiaries” became “implementers” involved in every step of the process, from planning to execution, building a sense of commitment and empowerment tackling challenges in the landscape together.

### **LESSON**

The MSP allows for joint analysis of issues and needs and can identify finance gaps and opportunities to inform programme interventions and long-term landscape solutions.

### **RECOMMENDATION**

Leverage on stakeholder capacities through MSP coordination to design effective solutions by mobilising available human resources, technical expertise and financial resources.

# 4.5.3 LANDSCAPE INVESTMENT



## **MESA: Accelerating living landscapes in Mesoamerica; taking landscape investment to a strategic level.**

In the early stage of embracing landscape programming Solidaridad Mesoamerica piloted the Landscape Investment and Finance Toolkit (LIFT), developed by IUCN NL and EcoAgriculture Partners, in the PASOS landscape in Honduras. LIFT supports landscape partnerships to analyse financing needs, strengthen business ideas, identify potential sources of finance, and develop successful strategies to secure this funding. After piloting the toolkit, Solidaridad embarked on a journey developing its own approach in attracting landscape investment resulting in MESA, an integrated landscape management strategy, driving the development of business models for landscape transformation.

## **MESA IS A DESIGN PROCESS TO IDENTIFY, STRUCTURE AND PROVIDE INVESTMENT OPPORTUNITIES**

MESA is a design process to identify, structure and provide investment opportunities to impact investors and blended finance donors in sustainable and regenerative business models, supporting the inclusive growth of social enterprises in Mesoamerica. MESA provides opportunities for industries to transition to more sustainable sourcing, supports national development priorities and is aligned with national climate commitments.

The essential challenge is to restore landscapes through appropriate finance and scalable models for people, planet and profit. Solidaridad believes that a new breed of asset investments into sustainable agribusiness and forestry initiatives can move beyond the business-as-usual paradigm, by demonstrating how a more sustainable and inclusive pathway to growth across the region generates long-term benefits for people, profit and planet. MESA accelerates three priorities in one investment portfolio at landscape scale:

- **Mitigation:** reduction of GHG emissions from energy, waste management, forestry and agriculture through more sustainable land use with the direct aim to reduce CO<sub>2</sub> emissions;
- **Adaptation:** water, food security and agriculture; biodiversity conservation;
- **Finance:** funding is urgently needed to speed up efforts, especially for adaptation.

Example initiatives in the current investment portfolio include:

- Supporting smallholder diversification with cocoa agroforestry systems through commercial models
- Improving bio-connectivity in sustainably managed oil palm production systems
- Land use mapping and facilitating land-titling of smallholder palm producers.
- Reforestation and restoration of fragile ecosystems to reduce soil loss, ensure water

quality and quantity to downstream users.

MESA is an innovative route for businesses, investors, donors and governments to contribute to key SDGs (1,7,8,9,13,14&15), by securing concrete commitments and action from communities, civil society, government, and the private sector, including the financial sector.

### **LESSON**

Solidaridad is uniquely positioned as a neutral facilitator and convener of landscape partnerships. The strategic approach of MESA structures and professionalises the process of identification, co-design and project development towards investment opportunities and deal structuring.

### **RECOMMENDATION**

Scaling positive impact at landscape level requires strategic commitment and long-term vision. MESA is a testimony to this commitment and vision, and embraced by Solidaridad Central America as a strategic approach in the region.

# ORGANISATIONAL LEARNINGS

## 9 LESSONS TO TAKE FORWARD



Lessons learnt from landscape programming serve multiple goals: from practical improvements to our current efforts to strategic considerations that strengthen our commitment or shift our focus. Since the landscape approach was identified as an innovation theme at organisational level, it is valuable to formulate lessons that guide the organisation moving forward.

Building on findings from internal reflections<sup>26</sup> and conclusions from the external evaluation,<sup>27</sup> Solidaridad has identified strengths and weaknesses in its landscape interventions and programming. These have been formulated in the following recommendations:

### 1. SYSTEMATISATION OF PILOT RESULTS

PILOTS TO TEST LANDSCAPE SOLUTIONS ARE KEY TO THE LANDSCAPE APPROACH

Pilots could be improved in terms of understanding relevant issues in the enabling context (policies, regulations, systemic issues). There is need to define a protocol for pilot activities within landscape programming to enhance effectiveness. In design of pilot activities, it is important to 1) ensure ownership and monitoring by the MSP, 2) identify relevant policy and systemic issues, and 3) link with lobby and advocacy activities to improve uptake and enhance scaling.

### 2. INFLUENCING PUBLIC POLICIES

CLARIFY PROCESS STEPS IN POLICY INFLUENCING FOR EFFECTIVE LOBBYING & ADVOCACY

Landscape programmes have contributed to policy changes as well as to improved implementation of existing policies. However, the defined phases to capture and monitor progress in policy influencing need to be refined and expanded to include the various phases of policy implementation. These process steps should also align with and feed into capacity building of CSO partners in lobby and advocacy trajectories, as these inform strategic decisions in the policy influencing process. Additionally, a political economy analysis should inform landscape programming from the start and throughout implementation to better understand stakeholder power dynamics, relevant policies and systemic issues.

### 3. CONSOLIDATION OF TOOLS

FINALISATION OF A NETWORK-WIDE LANDSCAPE TOOLKIT

The internal task-force on climate and landscape guided the introduction and implementation of the landscape approach throughout the organisation. To

this end, the task-force selected a number of (existing) tools and guidance documents for Solidaridad to test in practice. These tools have been made accessible in an online toolbox to support future implementation of landscape programming. However, further refinement of the toolbox and internal commitment to the systematic use of tools is necessary to optimise the potential of this knowledge base in programme implementation. See annex I for more information about the Landscape Toolbox.

### 4. LANDSCAPE MONITORING

MULTI-LEVEL MONITORING PROTOCOL

Given the complexity of monitoring results and impact at landscape scale, it is critical to clarify what Solidaridad should cover as organisational monitoring and what monitoring should be designed, owned and managed by landscape institutions, MSP or (individual) stakeholders. A multilevel monitoring protocol is proposed where Solidaridad should focus its monitoring efforts on intervention level to ensure that the quality requirements of implementation are met. At landscape level, Solidaridad can guide and support the establishment of relevant monitoring systems within existing institutions as well as through partnerships - such as a MSP or with a local research institute. There are existing landscape monitoring frameworks that could be used, such as the LandScale framework (read more about Landscape Monitoring in text-box 4, page 88-89).<sup>28</sup>

### 5. IMPROVE LANDSCAPE ANALYSIS

IMPROVE LANDSCAPE ANALYSIS AND SCENARIO MODELLING TO ADDRESS SYSTEMIC ISSUES

Landscape programming requires a good political economy lens to understand power dynamics and identify relevant policies and systemic issues. Such an analysis, conducted in close collaboration with stakeholders, informs strategic decisions for lobby and advocacy and shapes the design of lobby and advocacy trajectories. Given the unpredictable political contexts

in which we work, this analysis should be revisited annually as part of a process of ‘progressive contextualisation’.

## 6. INVESTMENT

**LANDSCAPE INVESTMENT PORTFOLIOS REQUIRE CONTINUED EFFORT AND LEARNING TO BE REFINED AND IMPROVED**

There is a general recognition within landscape programming that blended finance solutions are necessary to move from donor-funded activities to investment proposals and business plans. Private sector and financial institutions should be engaged at an early stage in landscape interventions to progress jointly towards solid investment propositions. These propositions should address the companies’ bottom line and mitigate financial risks and concerns. Trade-offs exist among differing landscape uses and need to be reconciled. The landscape approach acknowledges the various trade-offs among these goods and services and addresses them in a spatially explicit and ecosystem-driven manner that reconciles stakeholders’ multiple needs, preferences, and aspirations.

## 7. LONG-TERM ENGAGEMENT

**AN INTEGRATED LANDSCAPE APPROACH REQUIRES A LONG-TERM COMMITMENT**

Based on investments in landscape programming so far and the achievements to date, there is a strong case for Solidaridad to provide continuous support to a number of selected landscapes. An integrated landscape approach requires time and commitment, which does not necessarily mean large funding. A low intensity support is suggested to sustain and support the landscape initiatives.

## 8. PRIVATE SECTOR ENGAGEMENT FOR SUSTAINABLE LANDSCAPES

**ENGAGEMENT OF PRIVATE SECTOR AND SECTOR TRANSFORMATION**

The landscape programmes demonstrated mixed results on private sector engagement and sector transformation. Market access is essential for sustainable landscapes, meeting local needs, providing economic opportunities to gain an income and to break the cycle of unsustainable practices degrading natural resources. From a supply chain perspective, private sector actors have the power and leverage to realise positive impact in the sourcing landscape. Solidaridad needs to leverage on supply chain and sector level expertise to achieve results with private sector engagement, sector transformation and market development at landscape scale.

## 9. STANDARDISED TERMINOLOGY FOR THE NETWORK

**A COMMON NETWORK UNDERSTANDING OF KEY CONCEPTS AND TERMS**

The landscape programmes are implemented by different teams in very diverse contexts; hence there is an absence of uniform definitions or understanding of landscape and climate concepts. Starting from a common understanding of the landscape approach, there is need for ongoing network-wide exchange and agreement on key terms and concepts to enable learning.



## TEXT-BOX 4: ORGANISATIONAL CHALLENGE: HOW TO GO ABOUT LANDSCAPE MONITORING?

### CONNECTING EFFORTS

Landscape monitoring is crucial to support and underpin sustainable land and resource governance and therefore monitoring is a key element of a landscape approach. Landscape monitoring is integral to landscape management, therefore it cannot be approached simply from the perspective of programmatic monitoring by Solidaridad. Landscape monitoring should become an embedded process owned by existing institutions or stakeholders to improve landscape management at different levels of scale, while learning and adapting over time.

### MONITORING CHALLENGES

There are multiple factors which hamper effective monitoring in a landscape, such as: lack of institutional mandate, lack of resources (human, financial, technological, operational or a combination), and lack of coordination between stakeholders involved. Even if all of these conditions are in place, monitoring of ecosystem functions or impacts on the landscape are complex and require a system perspective on causal loops and interconnections which make it difficult to find the right indicators or design effective monitoring systems to track change over time. Furthermore, landscape monitoring is still often fragmented in time and place and carried out by a range of stakeholders who are not connected or not aligned (such as government authorities, community or producer groups, private sector). Recognising the challenges above, it is clear that existing monitoring efforts are often not sufficiently able to address resource management questions at stake - for example regarding land, water and forest management.

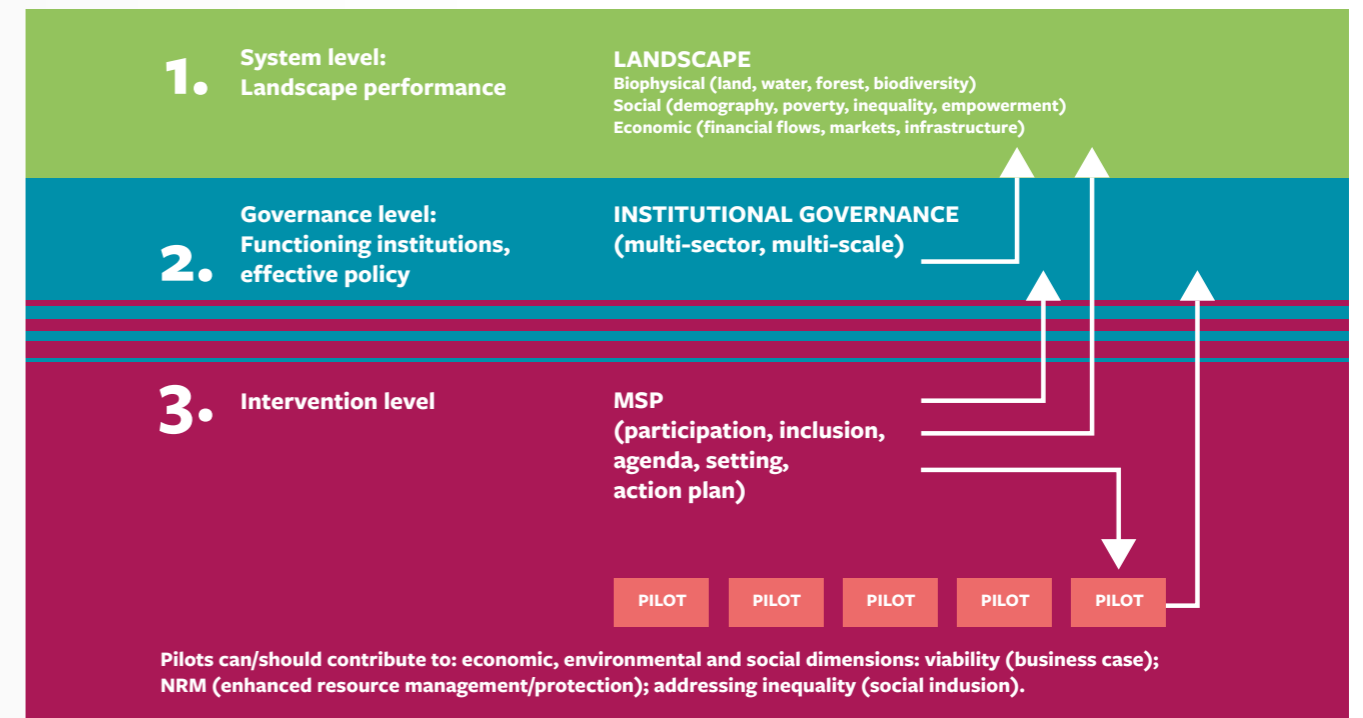
### MULTI-ACTOR MONITORING APPROACH

When taking a landscape approach, Solidaridad is uniquely positioned to coordinate monitoring efforts in close collaboration with stakeholders. There are three entry points to target and coordinate such effort, by focusing on: 1) stakeholder capacities, 2) effective collaboration in MSP context and 3) a shared vision for the landscape. At each level Solidaridad can contribute or invest in landscape monitoring with lasting impact beyond a programmatic scope. For example, farmers training on soil management and integrating soil testing as part of local extension services is an example of how stakeholder capacity is improved and monitoring becomes part of implementation of best practices. In MSP context both the functioning of the MSP as well as pilot activities and policy influencing are topics to track and monitor. Lastly, alignment in the MSP on a shared vision for the landscape, based on identified challenges and needs, is a critical reference point to prioritise actions to work towards desired change – both in policy and practice. This type of shared landscape analysis provides for a baseline to track progress over time working towards the landscape vision.

### MULTI-LEVEL MONITORING APPROACH

In addition to the entry points from actor perspective, we can distinguish multiple scale levels in organising monitoring efforts. These scale levels help distinguish between the degree of control and influence which Solidaridad has on (direct) landscape interventions and (indirect) system level change. Figure 1 shows the connections between the different levels:

1. System level focuses on “landscape performance”
2. Governance level focuses on functioning institutions, policies and formal and informal rules of the game, including incentive and accountability structures.
3. Intervention level covers both the MSP as well as the pilots. The MSP coordinates pilot implementation and findings are reported back to MSP to learn, adapt and/or scale. Strategic learning and communication about pilots should inform lobby and advocacy to governance level.



### INSTITUTIONAL CAPACITY FOR LANDSCAPE MONITORING

Given the complexity of monitoring results and impact at landscape scale it is critical to clarify what Solidaridad can cover as organisational monitoring and what monitoring should be designed, owned and managed by landscape institutions, MSP or (individual) stakeholders. A multi-level monitoring protocol is proposed where Solidaridad focuses monitoring efforts on intervention level to ensure quality requirements of implementation are met. Lobby and advocacy strategies can use evidence from pilots to push for change at governance level. On landscape level Solidaridad can guide and support setting up relevant monitoring systems within existing institutions as well as through partnerships - such as MSP or with local research institutions. The conclusion is that landscape monitoring is not a single coordinated endeavour by one actor but a patchwork of smaller efforts by a wide range of stakeholders and systems which need to connect logically. There are existing landscape monitoring frameworks being developed, such as the LandScale framework.

### TOOLS AND GUIDELINES

There is not one overarching landscape monitoring tool, but there are existing methodologies which can help identify, manage and monitor landscape functions.

- **LandScale**  
LandScale provides a standardised approach for assessing and communicating the sustainability performance of landscapes where key commodities are produced. LandScale is designed to provide reliable information about the outcome of efforts to protect ecosystems, promote human well-being, improve governance, and optimise productivity at landscape scale.
- **High Conservation Landscape Screening**  
HCV methodology is a known methodology in the context of commodity certification (such as RTRS for soy and RSPO for oil palm). It helps identify high conservation values such as biodiversity, primary forest and water bodies as well as socio-cultural values for local communities. The HCV methodology has been adapted to serve landscape and jurisdictional scale approach, which provides as a starting point to identify, manage and monitor high conservation values in a landscape.

# 5 IN CONCLUSION



## 5.1 LEARNING TOGETHER

This report is an effort to document our learning journey and to share our experience in landscape programming and taking a landscape approach. Five years of landscape work has taught us a lot, but we also recognize we are at the beginning of understanding what it means to coordinate and facilitate collaboration at landscape level and realize impact at landscape scale. This is a journey that takes time and requires strong partnerships to drive meaningful change.

## 5.2 MOVING FORWARD

How can we move forward building on the lessons learnt? Luckily, there are many ways in which lessons can be taken forward within our organisation. This is a collaborative effort by individuals, teams, regional offices and at network level as well as by Solidaridad's local and global partners. Solidaridad is committed to continue working in production landscapes around the globe to realise an inclusive and sustainable economy which contributes to human well-being while respecting and protecting our planet.

**WE WANT TO REDEFINE SUSTAINABILITY AND RECLAIM ITS ESSENCE: POWER TO THE PEOPLE (INCLUSIVITY), RESPECT FOR THE PLANET (PRODUCING IN BALANCE WITH NATURE) AND A FAIR SHARE FOR EVERYONE ACROSS THE CHAIN (PROSPERITY). THAT'S GENUINE SUSTAINABILITY**

## 5.3 FUTURE OUTLOOK

The start of 2021 marks the beginning of a new five year strategy for Solidaridad, titled Reclaiming Sustainability 2021 - 2025. This strategy builds on lessons from the past and will guide our work across the global network with clear priorities for the future. The value of taking a landscape approach and the experience gained through landscape programming is recognised and taken forward in the new strategy in three ways.

- First, understanding sustainability challenges at landscape level and mobilising landscape stakeholders is key to drive effective interventions within landscapes. This landscape level perspective will continue to be part of Solidaridad's comprehensive approach of driving sustainable change.
- Secondly, the new strategy highlights the role of local urban markets in future landscape programming with increased attention for local economic development and resilient food systems. Rural-urban connections can be used as a catalyst for change, where producers deliver high-quality and healthy food to conscious consumers who are willing to pay a fair price and remunerate environmental stewardship in the landscape.
- Lastly, the agenda laid out with Reclaiming Sustainability is based on three guiding principles:

balance with nature, prosperity, and inclusivity. A landscape perspective is critical to translate global sustainability challenges to local action. Landscape initiatives provide an operational scale to mobilise stakeholders, understand issues and needs, and jointly contextualise the meaning of sustainability based on indigenous values.

## 5.4 CELEBRATING TEAMWORK IN A LEARNING ORGANISATION

Lastly - but most importantly - it is the teamwork of landscape practitioners that made this internal learning agenda a success: their willingness to share and exchange openly their questions, doubts and experiences. The learning agenda was a dedicated internal trajectory to support this process. Solidaridad continues to strive towards developing as a learning organization. Throughout this endeavor, we recognize "(.) it is the passion and capability of our people that drives us forward and helps to maintain our position as a knowledgeable and visionary, yet pragmatic partner for sustainable sector change." Adopting a learning mindset is the driver for collaboration and positive change, within a team, an organization as well as in a landscape.<sup>29</sup>

## BIBLIOGRAPHY

- 1 MASP 2021-2025 Solidaridad Network  
 2 Denier, L. et al (2015) The Little Sustainable Landscapes Book Global Canopy Programme, Oxford  
 3 Kusters, K. (2015) Climate-smart landscapes and the landscape approach – An exploration of the concepts and their  
 practical implications. Tropenbos International, Wageningen  
 4 Brouwer, H. et. al (2016), The MSP Guide, How to design and facilitate Multistakeholder Partnerships, published by:  
 Wageningen University & Research, CDI The Netherlands  
 5 Sayer et al (2013), Ten Principles for a landscape approach to reconciling agriculture, conservation, and other  
 competing land uses.  
 6 Brouwer, H. et. al (2016), The MSP Guide, How to design and facilitate Multistakeholder Partnerships, published by:  
 Wageningen University & Research, CDI The Netherlands  
 7 Reed, et.al. (2020), Integrated landscape approaches in the tropics: A brief stock-take,  
 Land Use Policy, Volume 99, <https://doi.org/10.1016/j.landusepol.2020.104822>  
 Brouwer, H. et. al (2016), The MSP Guide, How to design and facilitate Multistakeholder Partnerships, published by:  
 Wageningen University & Research, CDI The Netherlands  
 8 Flikweert, W. et al (2020) Multi-stakeholder Partnership Policy Guidelines, traineeship assignment for AMID at  
 Radboud University Nijmegen, The Netherlands.  
 9 Reed, J et.al. (2020), Integrated landscape approaches in the tropics: A brief stock-take,  
 Land Use Policy, Volume 99, <https://doi.org/10.1016/j.landusepol.2020.104822>  
 10 Part of WUR research project “Next Generation Governance Arrangements for Sustainable Global Value  
 Chains”; Publication: Bottema, M. J. M., Bush, S. R., & Oosterveer, P. (2018). Moving beyond the shrimp farm:  
 Spaces of shared environmental risk? Geographical Journal. <https://doi.org/10.1111/geoj.12280>  
 11 Website article Solidaridad: <https://www.solidaridadnetwork.org/solidaridad-stories/indigenous-communities-strengthen-resilience-in-the-face-of-drought>  
 12 Kusters, K., M. De Graaf and L. Buck. 2016. Guidelines: participatory planning, monitoring and evaluation of multi-  
 stakeholder platforms in integrated landscape initiatives. Working paper. Wageningen, the Netherlands:  
 Tropenbos International and EcoAgriculture Partners.  
 13 Bednar, Danny & Henstra, Daniel. (2018). Applying a Typology of Governance Modes to Climate Change Adaptation.  
 Politics and Governance. 6. 147-158.  
 14 World Bank. 2017. World Development Report 2017: Governance and the Law. Washington, DC: World Bank.  
 doi:10.1596/978-1-4648-0950-7. License: Creative Commons Attribution CC BY 3.0 IGO  
 15 Bednar, Danny & Henstra, Daniel. (2018). Applying a Typology of Governance Modes to Climate Change Adaptation.  
 Politics and Governance. 6. 147-158.  
 16 Cited from Bednar & Henstra, 2018: Pierre, J. (2000). Introduction. In J. Pierre (Ed.), Debating governance: Authority,  
 steering, and democracy. New York, NY: Oxford University Press.  
 17 Cited from Bednar & Henstra, 2018: Rhodes, R. A. (1997). From marketization to diplomacy: It’s the mix that matters.  
 Public Policy and Administration, 12(2), 31–50.  
 18 Cited from Bednar & Henstra, 2018: Fleming, J., & Rhodes, R. A. W. (2005). Bureaucracy, contracts and networks:  
 The unholy trinity and the police. Australian & New Zealand Journal of Criminology, 38(2), 192–205.  
 19 Bednar, Danny & Henstra, Daniel. (2018). Applying a Typology of Governance Modes to Climate Change Adaptation.  
 Politics and Governance. 6. 147-158.  
 20 Ostrom, Elinor (1990). Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge  
 University Press. ISBN 978-0-521-40599-7  
 21 <https://en.mapa-solidaridad.org/post/honduran-palm-oil-sector-commits-to-zero-deforestation>  
 22 Shames, S., B. Louman and S. Scherr. The Landscape Assessment of Financial Flows: A Methodology. Tropenbos  
 International and EcoAgriculture Partners: Wageningen, the Netherlands.; p.5  
 23 Reed, J et.al. (2020), Integrated landscape approaches in the tropics: A brief stock-take,  
 Land Use Policy, Volume 99, <https://doi.org/10.1016/j.landusepol.2020.104822>; p.7  
 24 Shames, S., B. Louman and S. Scherr. The Landscape Assessment of Financial Flows: A Methodology. Tropenbos  
 International and EcoAgriculture Partners: Wageningen, the Netherlands.; p. 10  
 25 <https://www.solidaridadnetwork.org/news/partnerships-for-pandemic-support-in-paraguay>  
 26 Solidaridad Task Force Sustainable Landscape Internal Evaluation findings 2020  
 27 Aidenvironment End Evaluation AFC 2020, Landscape Insights & Recommendations  
 29 Solidaridad Europe (2020) Learning Policy: Cultivating Knowledge within REC Europe, p.5

## ANNEX 1: LANDSCAPE TOOLBOX



With the Learning Agenda on Landscapes Solidaridad has invested in a select number of existing and new tools which address specific elements of landscape level programming and implementation. The tools provide support and guidance to conduct analysis and participatory assessments to engage stakeholders. The aim of these tools is to jointly generate knowledge about the landscape, help to identify and prioritise interventions and enable capacity building and learning.

From the start in 2017, these tools have been presented to landscape practitioners and depending on the needs in ongoing landscape programmes, the available tools have been tested in practice and developed internally. The Landscape Toolbox is an internal resource, accessible for all Solidaridad staff, and provides access to the selected tools, guideline documents and experiences as documented in the landscape programmes across the network.

Above info-graphic provides a visual overview of the selection of tools available. In this Lessons Learnt report Tools and Guidelines are referred to per Chapter and when applicable for specific case study examples.

The Landscape for People Food and Nature Initiative (LPFN) has served as an example and source of inspiration in making existing tools and knowledge available for landscape practitioners, to enhance learning and sharing across organisations and prevent duplication of effort. This external resource continues to be available online:

<https://peoplefoodandnature.org/learning-network/find-tools/>

# Solidaridad

---



## LANDSCAPE APPROACH

LESSONS LEARNT