

NGP South Africa study tour

November 2014

# New Generation Plantations and Resilient Landscapes

*Think piece*

[www.newgenerationplantations.org](http://www.newgenerationplantations.org)

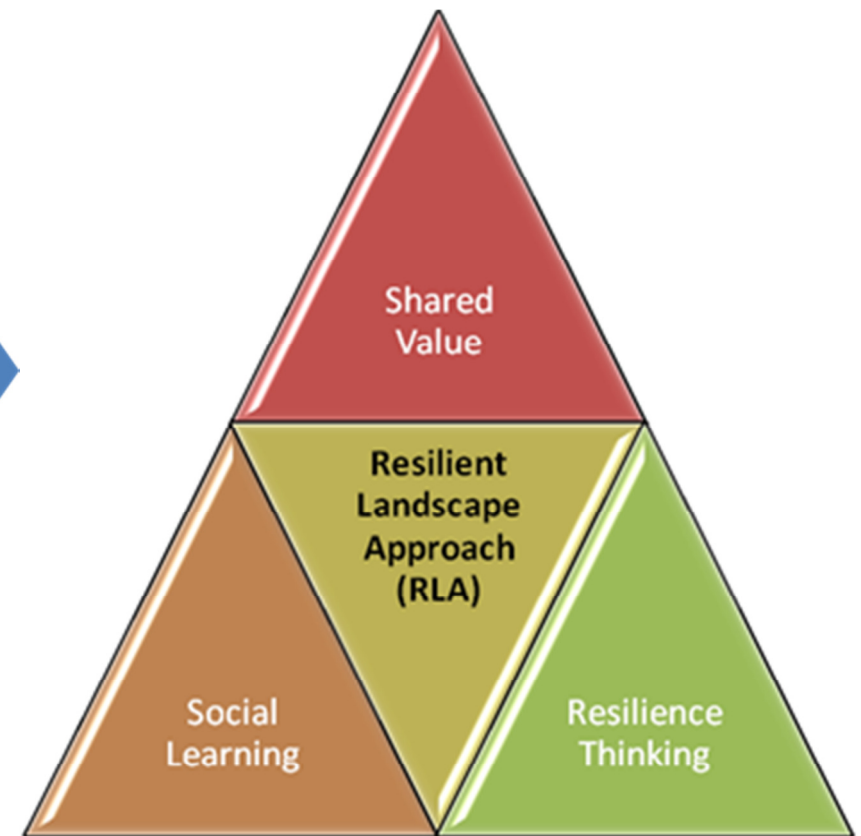
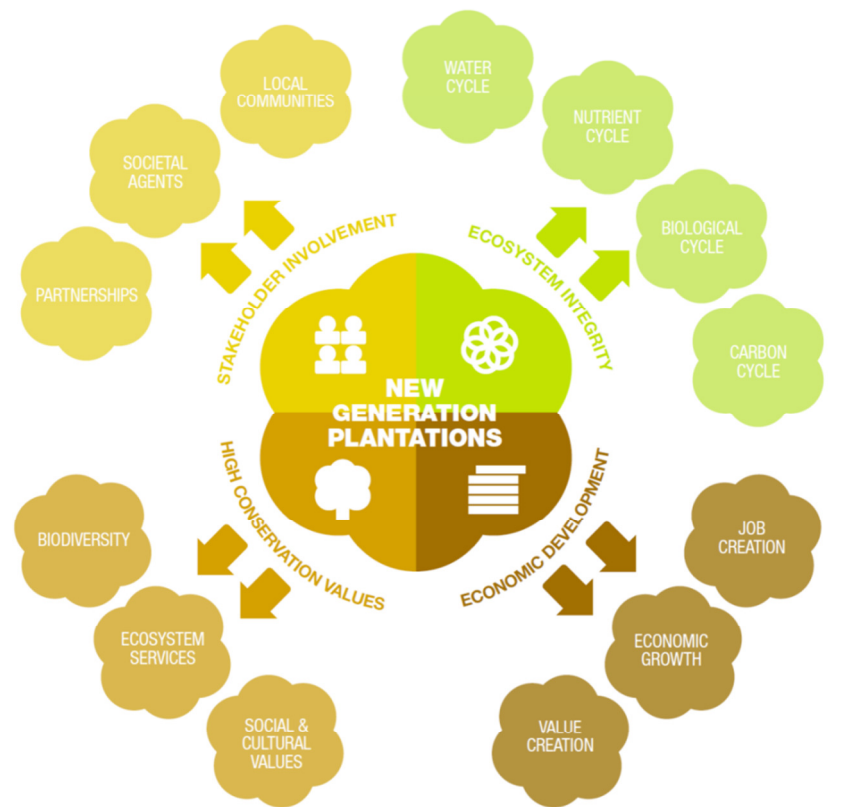


This paper introduces two interrelated concepts: New Generation Plantations (NGP) and the Resilient Landscapes Approach (RLA). These concepts can complement and provide new perspectives on each other, bringing the RLA into plantations management, and NGP into the landscape approach.

Based on *Defining the Resilient Landscapes Approach*,  
Mondi Wetlands Programme, WWF-South Africa

Written by Jessica Cockburn, Nokuthula Dubazane,  
Donovan Kotze, Brent Corcoran and David Lindley

Edited by Barney Jeffries and Luis Silva



# NGP & RLA

During the course of this study tour, we invite you to make your own observations on how you've seen these two concepts implemented on the ground and mirrored in each other. Please use the table below to record your field observations, and share them with us during our group discussions.

New Generation Plantations	Resilient Landscapes Approach	Observations
Ecosystem integrity <ul style="list-style-type: none"> <li>• Water cycle</li> <li>• Nutrient cycle</li> <li>• Biological cycle</li> <li>• Carbon cycle</li> </ul>	Resilience thinking <ul style="list-style-type: none"> <li>• Socio-ecological systems cope and adapt to uncertainty and change</li> <li>• Ecosystem resilience underpins livelihood and production resilience</li> </ul>	
High conservation values <ul style="list-style-type: none"> <li>• Biodiversity</li> <li>• Ecosystem services</li> <li>• Social and cultural values</li> </ul>		
Stakeholder involvement <ul style="list-style-type: none"> <li>• Partnerships</li> <li>• Societal agents</li> <li>• Local communities</li> </ul>	Social learning <ul style="list-style-type: none"> <li>• Actively learning together with multiple viewpoints</li> <li>• Sharing knowledge, experiences, values and beliefs</li> <li>• Co-constructing solutions together in complex contexts</li> </ul>	
Economic development <ul style="list-style-type: none"> <li>• Job creation</li> <li>• Economic growth</li> <li>• Value creation</li> </ul>	Shared value <ul style="list-style-type: none"> <li>• Securing economic value while delivering environmental and social value for society</li> </ul>	

# About NGP

## What is the New Generation Plantations (NGP) platform?

Set up by WWF in 2007, NGP brings together companies and government forest agencies from around the world to explore, share and promote better ways of planning and managing tree plantations. As NGP has developed, participants have realized the need to cross boundaries and engage with other land uses in the agricultural sector, such as sugar and dairy, in a landscape approach.

The NGP platform is a place for sharing knowledge about good tree plantation and land management practices and learning from each other's experience, through events such as study tours, workshops and conferences. As well as improving their own practices, participants seek to advance tree plantation and agricultural management more widely by sharing information and leading by example. Beyond the core group of participants, NGP engages with other tree plantation and agricultural companies and governments, along with civil society organizations, other land users, major buyers and retailers of forest and agricultural products, and the finance sector.

By working and learning together, NGP aims to make the next generation of tree plantations and agricultural land uses a force for good – socially, environmentally and economically.



For more information on NGP, please refer to [www.newgenerationplantations.org](http://www.newgenerationplantations.org).

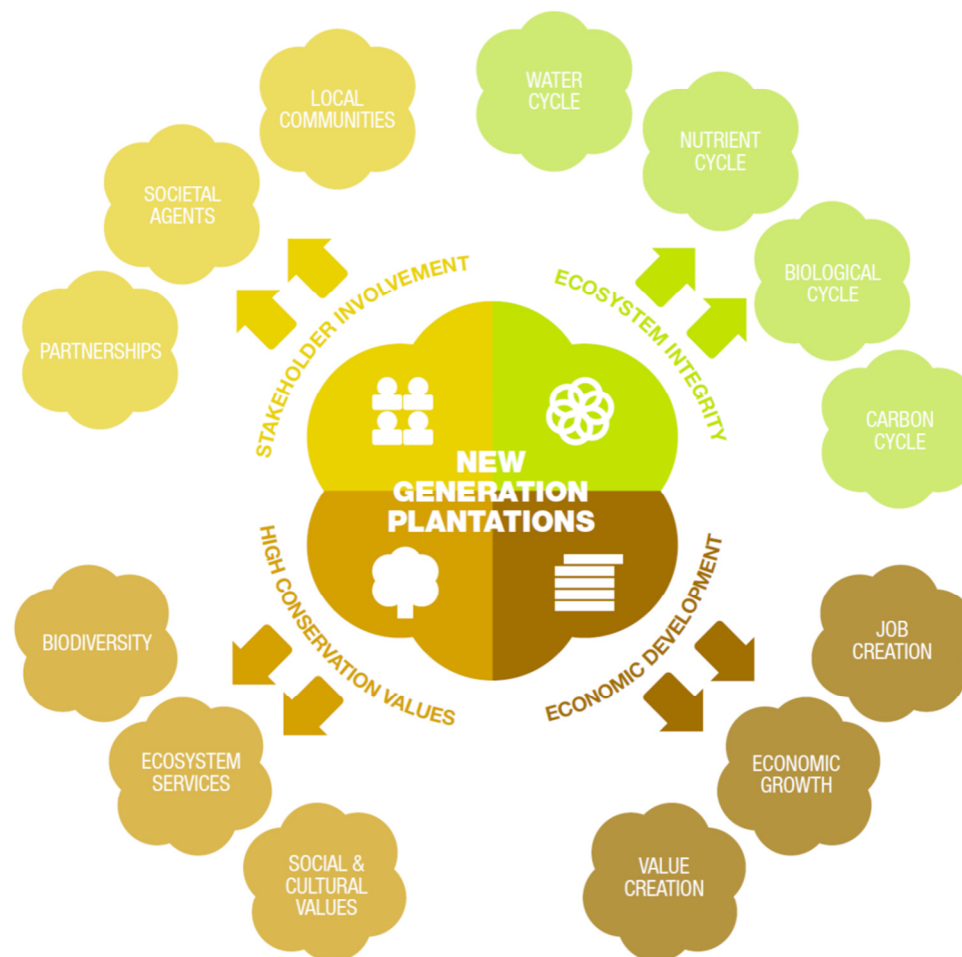
## The NGP concept

NGP is not about setting a standard that guarantees specific requirements have been met – participants use tools such as Forest Stewardship Council (FSC) and International Standards Organisation (ISO) certification to offer assurance of responsible forest management and business practices. Instead, a vision and a concept has been introduced for participants to work towards. This evolves as our knowledge and experience emerge and grow.

NGP's premise is that well-managed tree plantations and agricultural crops in appropriate places can help conserve biodiversity and meet human needs, while contributing to sustainable economic growth and local livelihoods.

Four key principles have been identified, acknowledging that plantations should:

- Maintain **ecosystem integrity**
- Protect and enhance areas of **high conservation value**
- Be developed through effective **stakeholder involvement** processes
- Contribute to **economic development** and employment.



**Figure 1:** The NGP concept, showing the four key principles

# The Resilient Landscapes Approach

This concept paper presents the Resilient Landscapes Approach (RLA), as implemented by WWF-South Africa's Mondi Wetlands Programme (WWF MWP). The RLA is a novel way of working with stakeholders in multifunctional landscapes. It's about working with agricultural and forestry commodity value chains to build the resilience of ecosystems, through collaborative learning and local action. The RLA brings together three concepts – resilience thinking, shared value and social learning – to support ecosystem stewardship on the ground.

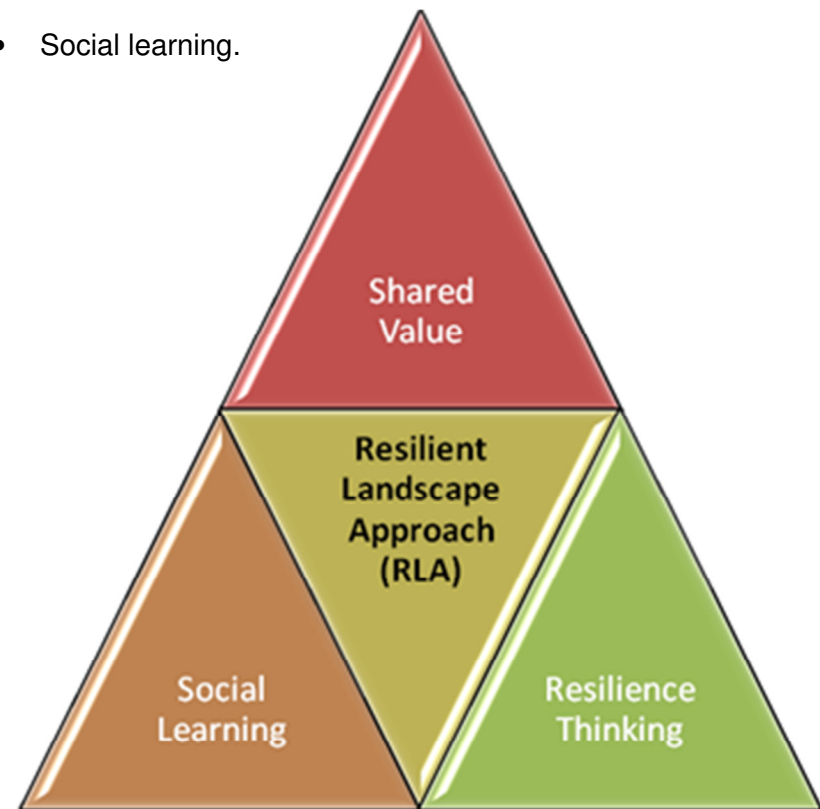
WWF-SA's experiences of engaging corporations and producers has revealed the importance of linking stakeholders that operate within the same landscape. For example, connecting local sugarcane farmers and an international sugar buyer helps demonstrate the risks and the benefits from the local landscape that both share. This connectedness allows them to better understand their ecosystem stewardship responsibilities, which go well beyond financial transactions. Through understanding these responsibilities, stakeholders further up the value chain can use their influence to improve the way producers manage the landscape.

The RLA facilitates multi-stakeholder social learning processes within and between sector-based value chains and local producers, in order to:

- Generate a shared understanding of ecosystem stewardship
- Reduce shared risks and enhance shared value from these landscapes through collaborative governance and action.

On the following pages we introduce three key concepts which underpin the RLA:

- Resilience thinking
- Shared value
- Social learning.



**Figure 2:** Components of the Resilient Landscapes Approach

# Resilience thinking

Recognizing the linkages between social and ecological systems is one of the cornerstones of resilience thinking. A social-ecological system (SES) is an integrated system of ecosystems and human society, which affect and depend upon each other.

Today's world is characterized by uncertainty and constant change, from global climate change to abrupt, unexpected changes in the world economy. If SESs are to retain the capacity to deliver benefits to society in the face of such uncertainty and change, resilience is crucial. Increasing the resilience of landscapes means they are robust to disturbances and can recover from unanticipated shocks: in a nutshell, resilience is the ability to “bounce back” from these shocks and changes.

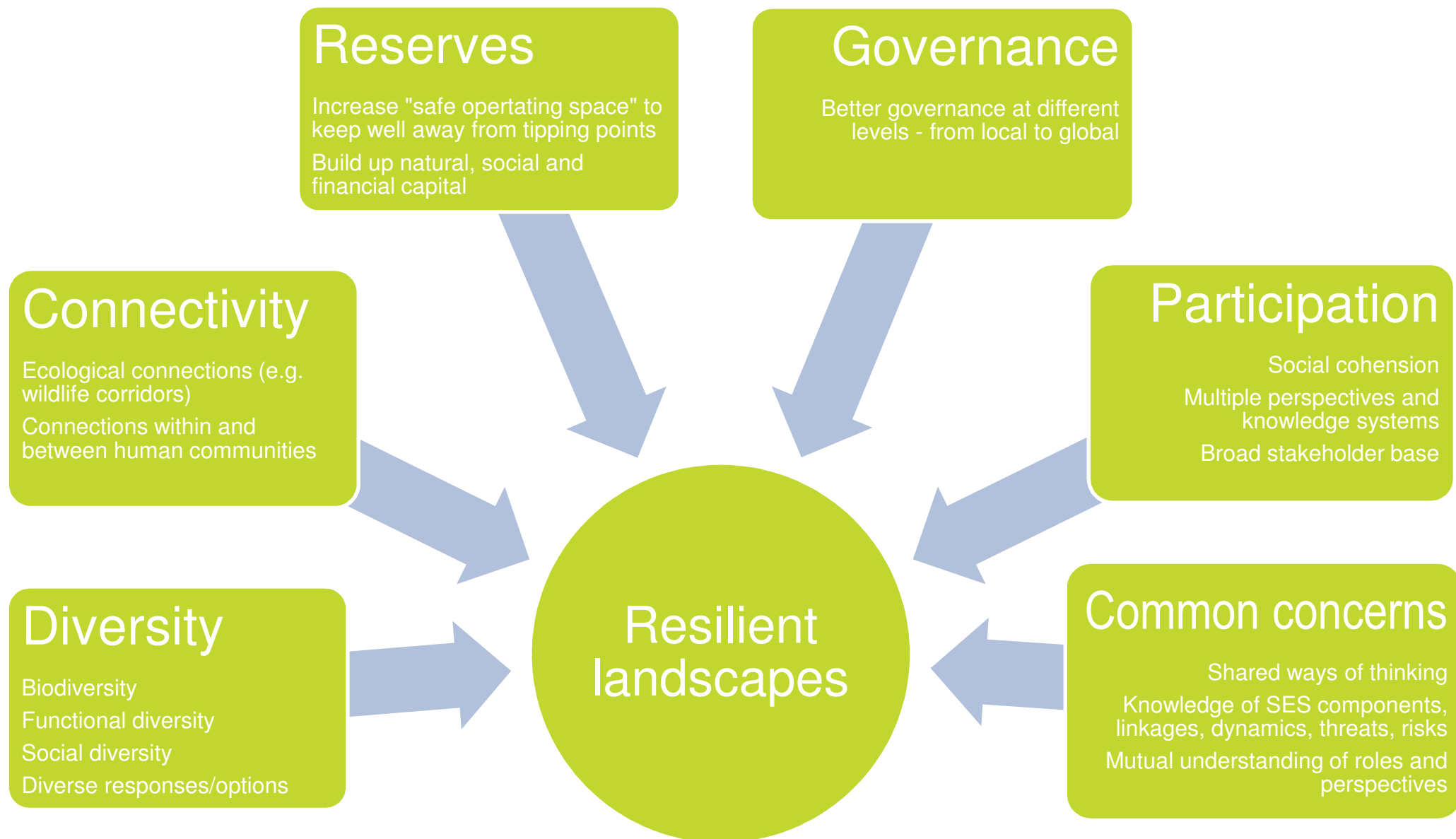
A resilient landscape is one that:

- Continues to function and provide a full range of ecosystem services
- Adapts and recovers from shocks such as floods and droughts
- Provides numerous ecological and socio-economic benefits.

The term resilience needs to be used with care. The table below gives a few examples of what resilience is, and what it is not, in the context of the RLA.

Resilience IS...	Resilience IS NOT...
A way of thinking and working	An end goal
About building capacity and buffers in social-ecological systems	About <i>not</i> changing
A lens through which social-ecological systems can be understood	An ideology, a buzzword or “the new sustainability”





**Figure 3:** Principles that can be used to enhance and build resilience in social-ecological systems



# Creating shared value

The concept of “creating shared value” (CSV) links the interests of corporate stakeholders in the agriculture and forestry value chains to farmers and local communities, and the ecosystems and catchments in the landscape that production depends upon.

CSV is defined as *“policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates. Shared value creation focuses on identifying and expanding the connections between societal and economic progress.”*

This places CSV at the intersection of creating business value and creating social and ecological value (Figure 4). Shared value is not about “sharing” the value already created by firms (i.e. redistribution). Rather, it is about expanding the total pool of economic and social value. Shared value moves companies away from a “trade-offs” to a “win-win” paradigm, in which both business and society benefit.



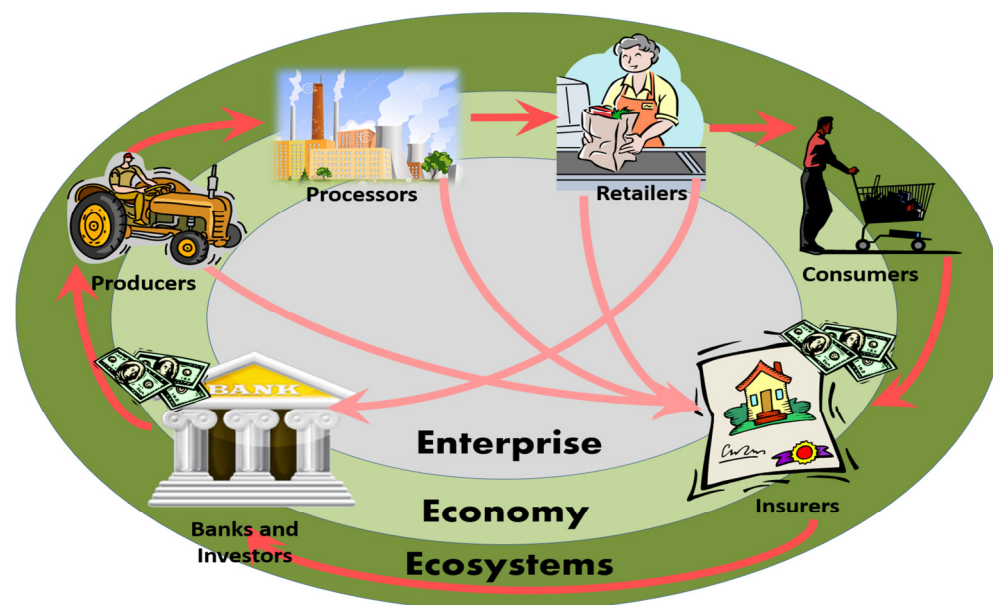
**Figure 4:** Creating shared value by finding opportunities where social value and business value overlap – i.e. working towards a win-win situation.

The market and consumers want to support brands that are environmentally and socially responsible. Companies are expected to take responsibility for their value chains and the ecosystems they depend on.

WWF-SA's view of sustainable value chains (Figure 5) highlights the need to take a systems approach to building sustainable value. Through CSV, companies can deliver value back down the value chain to the producers on the ground and contribute to increasing the resilience of ecosystems, and the multifunctional landscape as a whole.

Creating shared value in multifunctional landscapes depends on an understanding of shared risk. There has been a dramatic increase in environmental risks worldwide, climate change being one of the most significant. By building adaptive capacity, the RLA strengthens the resilience not only of the landscape, but also of the value chain.

Helping key actors in the value chain to better understand the linkages and associated risks is crucial for building resilience. For example, poor land management practices by farmers pose a risk to the insurance and finance sectors, or to those retailers wanting to improve their corporate sustainability and brand reputation – so improving practices to reduce this shared risk is in their interests.



**Figure 5: WWF-SA's view of sustainable value chains.** Ultimately, all enterprises are embedded within ecosystems, connected all the way from the land user to the insurer.

# Social learning

Social change, collective action and the ability to adapt and transform can all increase resilience. The process of social learning helps to bring this about.

Social learning takes place when people from different backgrounds, with different interests, come together in a safe space that encourages meaningful interaction. Participants share their knowledge, experience and views, and reflect on and question their own ideas and actions. This can lead to new understandings and changes in outlook and behaviour.

Guiding principles of social learning include:

## Valuing the process

Social learning is not only about *what* people need to know but *how* people come to learn, and how they will be able to challenge themselves and society.

## Changing values, beliefs, ideologies and assumptions

All of us learn values, norms and attitudes which make up our reality. Through collaborative learning, we can test this out against other people's reality – and reassess what we think we know.

## Disagreements are preconditions for learning and innovation

New knowledge can create dissonance, which stimulates innovation and learning. Moderate disagreements allow us to explore conflicting views, which can lead to innovative thinking. But this can only happen in a safe space where everyone feels able to speak their mind freely and without fear.

## Reflexivity

Internal reflection can bring us to question our own attitudes, thought processes, values, assumptions and actions, and to strive to understand our roles in relation to others. Self-reflection allows people to develop their own individual knowledge, values and actions, which will ultimately enhance a group's ability to make choices and take responsibility.

## Meaningful participation

In social learning, participation is vital. It must be seen as integral to the learning process, rather than as a tool to be used to achieve specific purposes.

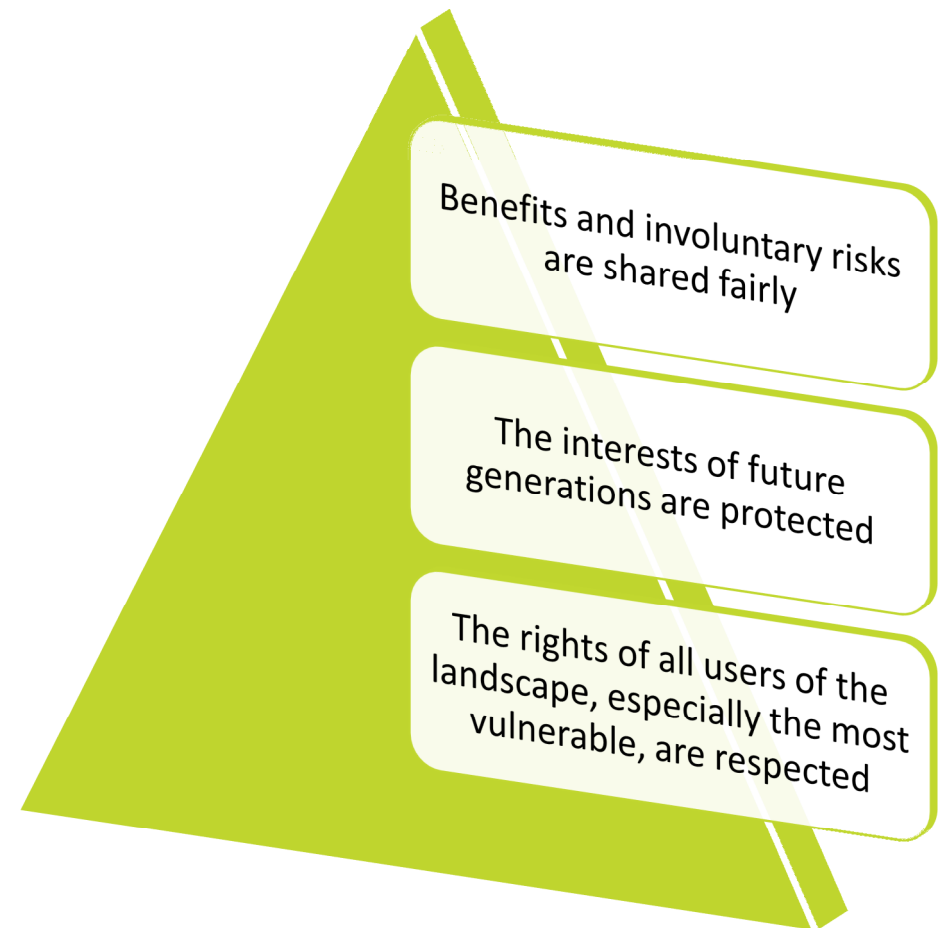


# The role of governance

Governance refers to the structures (including rules and regulations) and processes (including negotiation, mediation, conflict resolution, elections, consultations, etc.) by which societies share power and manage their affairs. Governance plays an important role in the resilience of ecosystems and the services they provide, and is a cornerstone of the RLA.

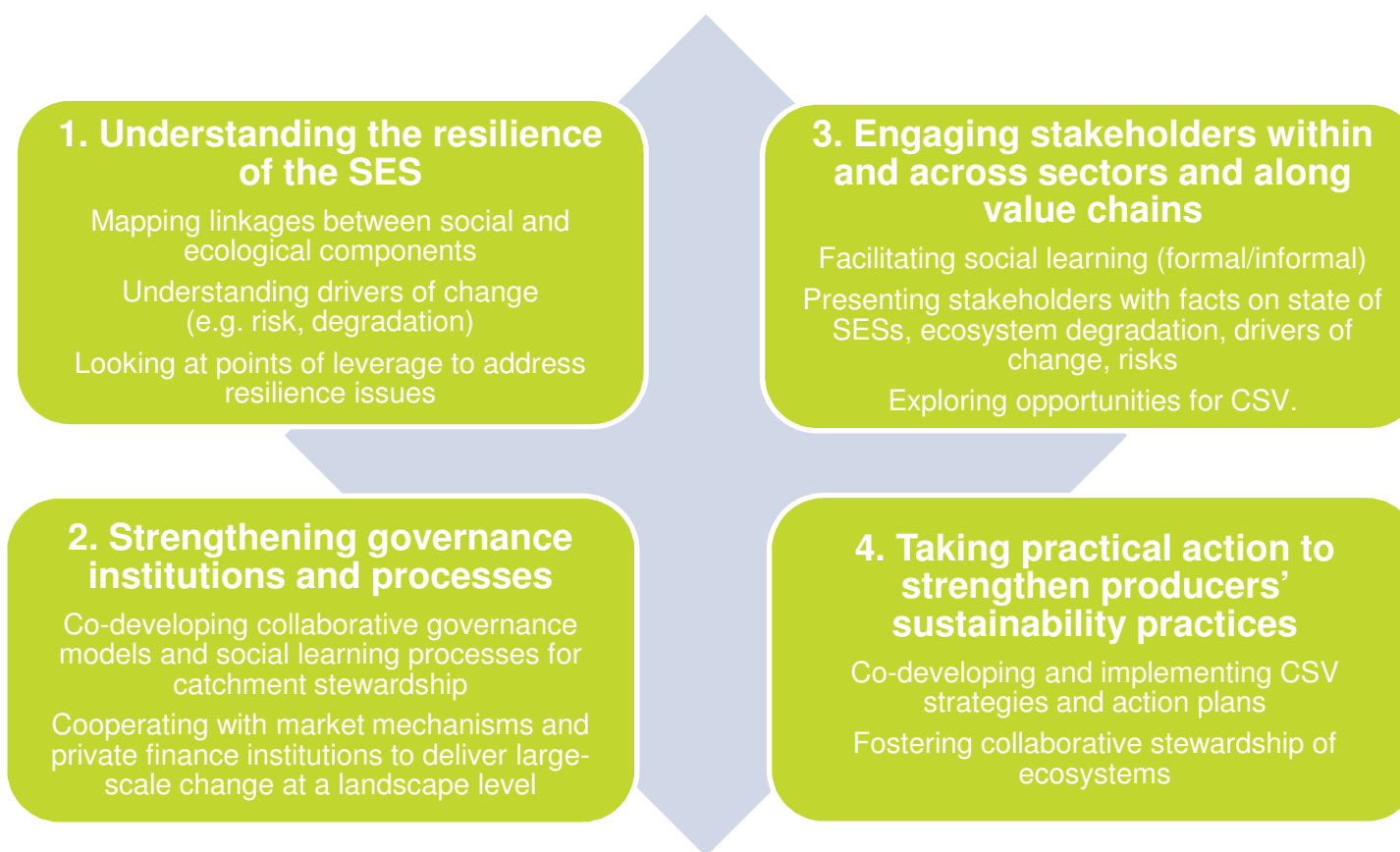
A key aspect of the RLA is that the benefits provided by a landscape or SES are shared fairly amongst current users, and between the current generation and future generations. In addition, the RLA seeks a just distribution of involuntary risks. Users will often vary greatly in terms of technologies, interests and levels of power, and inevitably there will be those who place their own interests before the shared interests in the landscape. This means rules are required to govern the use of resources in order to protect the rights of all users, particularly those who are most vulnerable.

A resilient SES needs a resilient governance system. Governance capacity and adaptive capacity are both important requirements for effective adaptive management of SESs.



**Figure 6:** The role of governance in the RLA

# The *How* – the RLA in practice



**Figure 6:** Key processes for putting the RLA into practice. These four modes of action are all linked to one another, and are used to support collaboration within and across sectors in the landscape.

The RLA is a dynamic process, and is likely to be adjusted to reflect the priorities, perceptions and values of stakeholders. We look forward to listening to your thoughts during the course of this study tour.

## Further reading and key references

### General:

Cumming, G. 2011. Spatial resilience: integrating landscape ecology, resilience, and sustainability. *Landscape Ecology* 26:899-909.

O'Farrell, P. J. and P. M. L. Anderson. 2010. Sustainable multifunctional landscapes: a review to implementation. *Current Opinion in Environmental Sustainability* 2:59-65.

Resilience Alliance. 2010. Assessing resilience in social-ecological systems: Workbook for practitioners. Version 2.0, Available online: [www.resalliance.org/3871.php](http://www.resalliance.org/3871.php) Accessed: 12 April 2014.

Worrell, R., and M. Appleby. 2000. Stewardship of Natural Resources: Definition, Ethical and Practical Aspects. *Journal of Agricultural and Environmental Ethics* 12:263-277.

### Resilience thinking:

Biggs, R., M. Schlüter, D. Biggs, E. L. Bohensky, S. Burnsilver, G. Cundill, V. Dakos, T. M. Daw, L. S. Evans, K. Kotschy, A. M. Leitch, C. Meek, A. Quinlan, C. Raudsepp-Hearne, M. D. Robards, M. L. Schoon, L. Schultz, and P. C. West. 2012. Toward principles for enhancing the resilience of ecosystem services. *Annual Review of Environment and Resources* 37:421-448.

Carpenter, S. R., and C. Folke. 2006. Ecology for transformation. *Trends in Ecology & Evolution* 21:309-315.

Chapin, F. S., III, S. R. Carpenter, G. P. Kofinas, C. Folke, N. Abel, W. C. Clark, P. Olsson, D. M. S. Smith, B. Walker, O. R. Young, F. Berkes, R. Biggs, J. M. Grove, R. L. Naylor, E. Pinkerton, W. Steffen, and F. J. Swanson. 2010. Ecosystem stewardship: sustainability strategies for a rapidly changing planet. *Trends in Ecology & Evolution* 25:241-249.

Walker, B., C. S. Holling, S. R. Carpenter, and A. P. Kinzig. 2004. Resilience, Adaptability and Transformability in Social-ecological Systems. *Ecology and Society* 9.

### Creating shared value:

Bockstette, V., and M. Stamp 2011. Creating shared value: a how-to guide for the new corporate (R)evolution. FSG, Available online: [www.fsg.org/tabid/191/ArticleId/351/Default.aspx?srpush=true](http://www.fsg.org/tabid/191/ArticleId/351/Default.aspx?srpush=true) Accessed: 15 July 2014.

Nel, J. L., D. C. Le Maitre, D. C. Nel, B. Reyers, S. Archibald, B. W. van Wilgen, G. G. Forsyth, A. K. Theron, P. J. O'Farrell, J.-M. M. Kahinda, F. A. Engelbrecht, E. Kapangaziwiri, L. van Niekerk, and L. Barwell. 2014. Natural Hazards in a Changing World: A Case for Ecosystem-Based Management. *PLoS ONE* 9:e95942.

Porter, M. E., and M. R. Kramer. 2011. Creating Shared Value. *Harvard Business Review* 89:62-77.

Seuring, S., and M. Müller. 2008. From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production* 16:1699-1710.



### **Social learning:**

Glasser, H. 2007. Minding the gap: The role of social learning in linking our stated desire for a more sustainable world to our everyday actions and policies. Pages 35-61 in A. E. J. Wals (ed.) Social learning towards a sustainable world. Wageningen Academic Publishers, Wageningen.

Lotz-Sisitka, H., M. Mukute, and M. Belay. 2012. The 'social' and 'learning' in social research: Avoiding ontological collapse with antecedent literatures as starting points for research. Pages 56-88 in H. Lotz-Sisitka (ed.) (Re)views on social learning literature: A monograph for social learning researchers in natural resources management and environmental education. Environmental Learning Research Centre, Rhodes University/EEASA/SADC REEP, Grahamstown/Howick.

Wals, A. E. J. 2007. Learning in a changing world and changing in a learning world: Reflexively fumbling towards sustainability. South African Journal of Environmental Education 24:35–45.

### **Governance:**

Fabricius, C., C. Folke, G. Cundill, and L. Schultz. 2007. Powerless spectators, coping actors, and adaptive co-managers: a synthesis of the role of communities in ecosystem management. Ecology and Society 12:29.

Lebel, L., J. M. Anderies, B. Campbell, C. Folke, S. Hatfield-Dodds, T. P. Hughes, and J. Wilson. 2006. Governance and the capacity to manage resilience in regional social-ecological systems. Ecology and Society 11:19.

Pollard, S., and T. Cousins 2007. Towards integrating community-based governance of water resources with the statutory frameworks for Integrated Water Resources Management: A review of community-based governance of freshwater resources in four southern African countries to inform governance arrangements of communal wetlands. WRC Report No. K8614. Water Research Commission, Pretoria.