Group 1

Wool and Mohair Promotion Project

IPROMO
Bioeconomy in mountain areas – an opportunity for local development
Torino 02 July 2018
Context and issues
History of wool and mohair industry in Lesotho

- Started in the 1850s – then the 1st producer of wool and mohair in the world
- 1900s - the number of livestock increased
- 2000s- quality and quantity of wool and mohair declined (now in 3rd position)
What happened?

Rangeland fires

Over-stocking
What happened?

Alien invasive plants

Land tenure system
Approaches and proposed solutions
Adoption of bio-economy principles

1. Sustainable resource management – responsible use of our shared resources
2. Food security and health – sufficient and nutritious food for all
3. Resilient and diverse ecosystems – a liveable plane
4. Inclusive economic and social prosperity – sustainable societies
5. Sustainable consumption – changing consumer behavior
Proposed approaches

1. Governance and institutional arrangements

2. Rangeland restoration and invasive plant species management

3. Building resilience and enhancing livelihoods through:
   - Improving animal breeding and adding value
   - Livelihoods diversification through improving manufacture and marketing for products based on medicinal plants

4. Enhancing cultural landscape services
1. Governance & institutional arrangements
Promote stewardship for multifunctional rangeland landscapes

- Build increased awareness of root causes of problems, as well as capacity to tackle them effectively
- Recognise social-ecological multi-functionality of rangeland landscapes
- Develop institutional arrangements for management of multi-functional rangeland landscapes
  - balancing ecological and social priorities of multiple, diverse actors
  - collaborative solutions that bring long-term ecological function and social justice
Institutional arrangements

- Develop laws and policies to guarantee environmental governability and decision-making on shared natural resources
- Develop institutional arrangements for controlled grazing and conflict resolution
- Adopt revised and progressive policies, norms and institutional arrangements aimed at increasing efficiency through new partnerships and incorporation of market principles in the landscape
2. Rangeland restoration and invasive plant species management
## Rangeland eco-restoration

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Rangeland invasives management

- Understand biology and ecology of invasive plants and the plant communities they invade; identify vulnerabilities of the invasives.

- Evaluate and implement technical available options to manage rangeland invasives - mechanical, cultural, biological, and chemical methods and revegetation with desirable plants.

- Develop long-term approaches consisting of prevention programs, education activities, and management to increase rangelands’ resistance to reinvasion.
3. Building resilience and enhancing livelihoods
Improving animal breeding and adding value

Animal health, husbandry, and nutrition

- Introducing new forage species or selecting local varieties nutrient high value, resistant to parasitic infection
- Develop local feed processing using local natural resources:
- Improved grassland management: e.g., solar powered electrical fences in order to avoid overgrazing
- Using alternative therapies: local species having bacteriostatic or probiotic properties.
- Disrupt host-pathogen cycles
Improving breeding and fertility

• Artificial insemination, crossing of breeds with different characteristics (fertile, health and disease resistance)

• Develop breeding programmes and conservation of animal genetic diversity

Other measures

• Supporting innovation and making a bridge between scientist and farmers
Other measures

**Human Capital**

*Organization for fiber selection:*
- Fine fiber (for industry)
- Thick fiber (for artisans)

**Market**

*International certificates for new consumers:*
- Social Enterprises
- Millennials
- Vegan influencers (PETA)

**Share experience**

*Agrotourism:*
Guided to farms with sustainable management.

**Private investment**

*Impact Investors*
Promote large scale (industry) and small scale (startups) impact investing.

**Local inputs**

*Goat manure:*
Biogas for local farmers
Natural fertilizers
More efficient, productive, and locally adapted livestock systems + innovation and circular economy
Manufacture new products and improve market for traditional medicines products

- Diversify rural people incomes.
- Increase employment opportunities for rural people.
- Discourage traditional doctor-to-patient type of utilization
- Empower traditional doctors and communities to produce value-added products to improve marketability and create jobs at local level
- *Aloe polyphylla* can be used for stomach ailments, skin disorders and as a constituent in cosmetics
Proposed actions

- Collect data on the harvested and marketed medicinal plants, including capacity and demand.
- Capacity building sessions with local communities on how to properly collect and cultivate medicinal, including marketing.
- In-situ and ex-situ conservation, including germplasm conservation (e.g. seedbanks) and cultivation of threatened medicinal plants (pilot area)
- Encourage rural people's participation in establishing medicinal plants microenterprises
- Nature reserves with clear and binding utilization plans
- Establish wild plant nurseries and Establish botanical gardens
4. Enhancing cultural landscape services
Enhancing cultural landscape services

Approaches

• Enhanced scenic, economic, ecological, social, recreational and educational opportunities

• Improved quality of life for all, and, above all, a sense of place or identity for future generations

• Maintenance of traditional ecological knowledge on rangeland management

• Maintenance of social relations among rural and urban citizens
**Indicative actions**

- Creation of a MAB reserve to give protection and visibility to the traditional use of the rangeland
- Designing trails and infrastructure for visitors to access the area
- Incorporate mandatory visits and participation in comunal in the school curricula
• Thank you!
• Faleminderit!
• Manana!
• Rea leboha!
• Gracias!
• Misaotra!
• Dhanyavaad!