Presentation title: *Resilient Pastoral Institution for a Changing Environment: the case of the Stock Routes Co-Management Approach in Western Sudan*¹

**1. BACKGROUND**

- Setting – Western Sudan - Greater Kordofan - typical drylands pastoral landscape
- Agro-ecological diversity (rainfall & soils), from desert and semi-arid in the north to dry/wet savannah in the south
- Socio-Economically – bi-modal or mixed livelihoods systems - ag/extensive livestock production system
- Complex & Fragile socio-economic & ecological context

Notes:
- While commonly considered as dryland, Kordofan's ecology still varies greatly, influenced by annual rainfall ranging from 50mm on the northern to more than 800mm on the southern border; from sandy soil to heavy cracking clay to sand;
- Kordofan hosts one of the highest concentration of (semi) mobile pastoralists in Sudan (% of the total pop & 40% of the overall beneficiaries outreach), thus the centrality of (livestock) mobility for sustainability
- Time & Space: Seasonal livestock mobility along a north-south axis defined by rainfall patterns; dry and wet season grazing zones
- Why a complex & Fragile socio-economic & ecological context?
  - Unregulated use of the NR-> Environmental degradation -> increasing pressures on NR -> expansion of traditional and semi-mechanized farms -> reduction in traditional range and pasture availability -> restricted mobility -> frictions with other land uses types -> breakdown of traditional NRM governance -> conflict between land and resource users -> low dev (i.e. infrastructure) -> further eco marginalization -> accelerate NR degradation
  - Additional factors: South-Sudan's secession which considerably altered transhumance along historical routes, thus disrupting adaptive mitigation strategies; the impacts of prolonged and protracted (civil) conflicts.

¹ The full paper will be uploaded on the conference's web site after going through an intensive quality review process.
2. **WSRMP**

- **Goal:** improve the equity, efficiency and stability of the economy of the greater Kordofan through the regulation and use of natural resources

- **Notes:**
  - The project’s been active since 2006 and closed in 2016; implementation followed an iterative process where each phases generating significant learning
  - WSRMP has several components -> The NRM thrust is one of 4 thematic comp in addition to extension; marketing and rural finance; rural feeder roads
  - NR Strategic approach: devolution of natural resources management to users’ communities through a negotiated process between the concerned communities, their leadership and relevant state agencies
  - NRM related activities
    - **Rangeland & pastures:** rehabilitation of open grazing areas, range seeds broadcasting, establishment of community protected rangeland, installing water harvesting structures, fire lines
    - **Forestry:** construction, rehabilitation and maintenance of nurseries at the Forest National Corporation (FNC) (ii) and community levels forestry and HH nurseries (iii) and agro-forestry planting demonstration
    - **Water:** introduction of improved water harvesting techniques and terraces for crops and micro-catchment for conservation such as contour ridges, runoff strips and planting pits/U shape structures; semi-circular and L-shape (supplementary irrigation)

3. **The case for investing in Livestock Routes...differently//WSRMP ToC**

- Going beyond standard demarcation to encapsulate longer term management, including a model of interaction balancing co-ownership between government, customary institutions and local communities

**Note:**

- Standards demarcation requires (i) accurate field identification on topographic maps of each stock route and its registration then clear demarcation either using concrete blocks or by planting belts of trees and/or marking trees and shrubs along both sides of the stock route; (ii) improvement in water facilities, pasture and fodder supply, and social and market infrastructure at camps; and (iii) grassland preservation, including short term pasture resting areas, reseeding, fodder conservation and fire-lines, and farmland regulation at the stock route ends

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2 Five key components with several interrelated and activities: (i) Natural Resource Management (NRM); (ii) Rural Financial Services and Marketing; (iii) Community Development and Extension; (iv) Rural Feeder Roads; and (v) Institutional Support
Multiplier effect: SRs are key landscape features of the greater Kordofan region, located at the junction of a) water bodies, b) sedentary settlements and c) weekly local markets places - zone of dense mobile livestock keepers/settlers interactions.

- Against this reality, WSRMP’s ToC/intervention logic consider investment in SRs as entry points with significant positive leveraging effects on sustainable NRM, eco dev and social cohesion.
- However, need to be preceded and coupled with investments in community development.
- Investment community development form a basis for co-management of SRs.

4. WSRMP phased implementation

- An iterative process: action-reflection-learning-adjustment-refinement cycle

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<th>Phases</th>
<th>Focus</th>
<th>Year</th>
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<tr>
<td>1. Pre-midterm</td>
<td>Bio physical</td>
<td>2006-2008</td>
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<td>Key points</td>
<td>Translating the right approach into practice:</td>
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<td>Building the capacity and bringing the different departments in addition to Range and Pasture &amp; Extension Departments (forest, range, agriculture, extension) together and operate as One Team</td>
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<td>Effective outreach, ensuring participation of pastoral and sedentary communities along and adjacent to the SRs</td>
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<td>Provide role and incentives for the native administration but avoid elite capture</td>
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<td>2. Post midterm</td>
<td>Socio-Institutional</td>
<td>2008-2012</td>
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<td>Key points</td>
<td>Dropped the social sector activities (primary school, health, nutrition) to reallocate resources entirely to green activities</td>
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<td>Reduced the scope: from intervening in 17 to 2 SRs (the eastern and western routes)</td>
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<td>CBOs consolidation: water users’ associations, cooperatives, stock route management committees, conflict resolution centers</td>
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<td>Emergence of the Stock Route Co-Management Model</td>
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<td>3. No cost extension year</td>
<td>Sustainment</td>
<td>2013</td>
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<td>Key points</td>
<td>Handing over of responsibilities from the PCU to line departments did not materialise</td>
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<td>4. Additional financing</td>
<td>Facilitation</td>
<td>2015-2016</td>
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<td>Key points</td>
<td>Supporting an enabling environment for negotiations; ensuring continued recognition of demarcated routes; promotion of collective ownership</td>
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<td>Refine the Stock Route Co-management Mechanism to achieve 2</td>
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Post MTR innovation:
- Creation of Mobile Extension Team/METs to reach out to mobile communities
- Introduction of innovative extension platform building on the PFS
- Strengthening of the CRCs

Notes:
- The METs represent a missing and essential elements to enhance outreach and inclusion of mobilize communities. The project has put in place a team of mobile multi-disciplinary extension team to facilitate better outreach to mobile groups
- Introduction of locally adapted extension platform building on the PFS

5. WSRMP’s STOCK ROUTES CO-MANAGEMENT APPROACH MODEL:
- Rational: models of interaction balancing co-ownership between government, customary institutions and local communities;
- Guiding Principles: Sharing and co-management of available resources between different users; additional new resources to be utilized as common property assets; Peaceful resolution of resource-based conflict
- Operational principles: multi-stakeholders -> require complex and strong collaboration among all engaged actors
- Structures of the SRs Co-Management Model
  - Stakeholders and functions:
    - Coordination/ backstopping: Technical departments
    - Advisory: Native administration (to link customary institutions with CO-M structures); State Council of Implementing Partners (CIPs) which equate to a general assembly
    - Implementation: METs lead the implementation;
- Additional Co-Management structures:
  - The essence of the Co-Management model. Local Co-management sector Team composed of representatives of native administration of both pastoral and sedentary communities, and representatives of government authorities responsible of that sector
  - Conflict Resolution Centres (CRCs) -> to work as guardian for agreements reached at the same time to work on complicated conflicts which raised to CRC by METs)

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3 WSRMP never aimed at scaling-up SRs. It wanted at least two model SRs; Obj - WSRMP never aimed at scaling-up SRs. It wanted at least two model SRs.
4 Animal Production, Extension, Range and Pastures departments at Ministries of Agriculture and Animal Resources in the three States
5 Mobile Multidisciplinary Extension Teams (METs) at locality levels in the three states representing different technical departments.
Pastoralists Field Schools serve to advocate, sensitize and diffuse the approach through a structured community level platform.

Notes:
- Local Co-Teams: Act as an interface with the communities based organizations; monitor and contribute to enforcement of decisions in their SRs sector; they oversee the activities of Pastoral Field School and the implementation of the designed curriculum.
- To make stock routes co-management approach and its plan operational, each of the selected two SRs is divided into several sectors. A sector is defined as a section of a SR that constitutes a specific sub-unit of native administration.
- Conflict Resolution Centres: (CRCs): The Programme has established up-to-date six conflict resolution centres (CRCs) along the stock routes. The centres have proven to be effective in resolving the emerging conflicts between farmers and nomads and others on lands, farming area border and resources.
  - Benefits of CRCs, (i) neutrality, (ii) strict governing system and regulations, (iii) driven by strong culture of voluntarism embedded in the societies, (iii) efficiency and time saving in solving cases when compared with court cases, (iv) combining between traditional jildiya practice and science-based conflict resolution guiding principles and values, and (v) specialization on natural resources-based conflicts which are usually complex with wider social implications that cannot be contained by strict laws.

6. WSRMP Achievements (up to June 2016)
- Physical Stock route demarcation: 4,897 km
- Formation of 11 co-management sectors (3 in NK, 5 in SK and 3 in WK) covering the 2 SRs
- Number of agreements over co-management of shared resources, water & grazing: 27
- Identification of new rest points for mobile pastoralists along SRs
- Opening of blocked routes
- 90% of referred cases to the CRCs are peacefully resolved

7. WSRMP Challenges
- Biases towards crop farming, failing to recognize the necessity to strengthen pastoral systems and institutions, including investing in sustainable rangeland management
  - Expansion of semi-mechanized farming -> negatively impact Range rehabilitation program
- Absence of holistic integrated rural development vision -> Silo mentality, bias towards existing sectoral, departmental or ministerial divisions to the degree that obstruct coordination among key Co-Mgmt Team
- Enabling environment at all levels is missing -> Institutional instability -> creation of a new State, West Kordofan -> constrained harmonization of different laws and their enforcement
• Institutionalisation of the model do not translate into operational budget-> the localities are not able to cater for any operational funds but paying salaries-> likelihood of sustainability of some project institutions remains uncertain

Notes:
• As a result - likelihood of sustainability of some project institutions remains uncertain

8. LESSONS LEARNED
• Senior people are needed which are respected and have a certain authority.
• High return when investing in social capital; i.e. CBOs, METs
• Working with mobile communities require innovative outreach and extension mechanisms (METs) & methodology (PFS)
• Overambitious design viz the volatile context:
  o Wide geographical area
  o Exaggerated expectations viz the issuance of formal titles on traditional land should be vested in the community through leases provided by the State to community-based organisations offering grazing-rights to transhumant groups for their seasonal pastures on a leasehold basis
• Problem-driven iterative process is necessary to adjust to changing institutional circumstances
• Provision of water through small water points is more cost effective and can be made at short intervals along the SR, thus avoiding capture by settled communities
• Insisting for water service to operate on a commercial basis from the onset, including for mobile communities

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