

REVIEWING IMPACT OF GOVERNANCE ON EFFECTIVENESS OF REVITALIZATION OF SMALLHOLDER IRRIGATION SCHEMES IN SOUTH AFRICA

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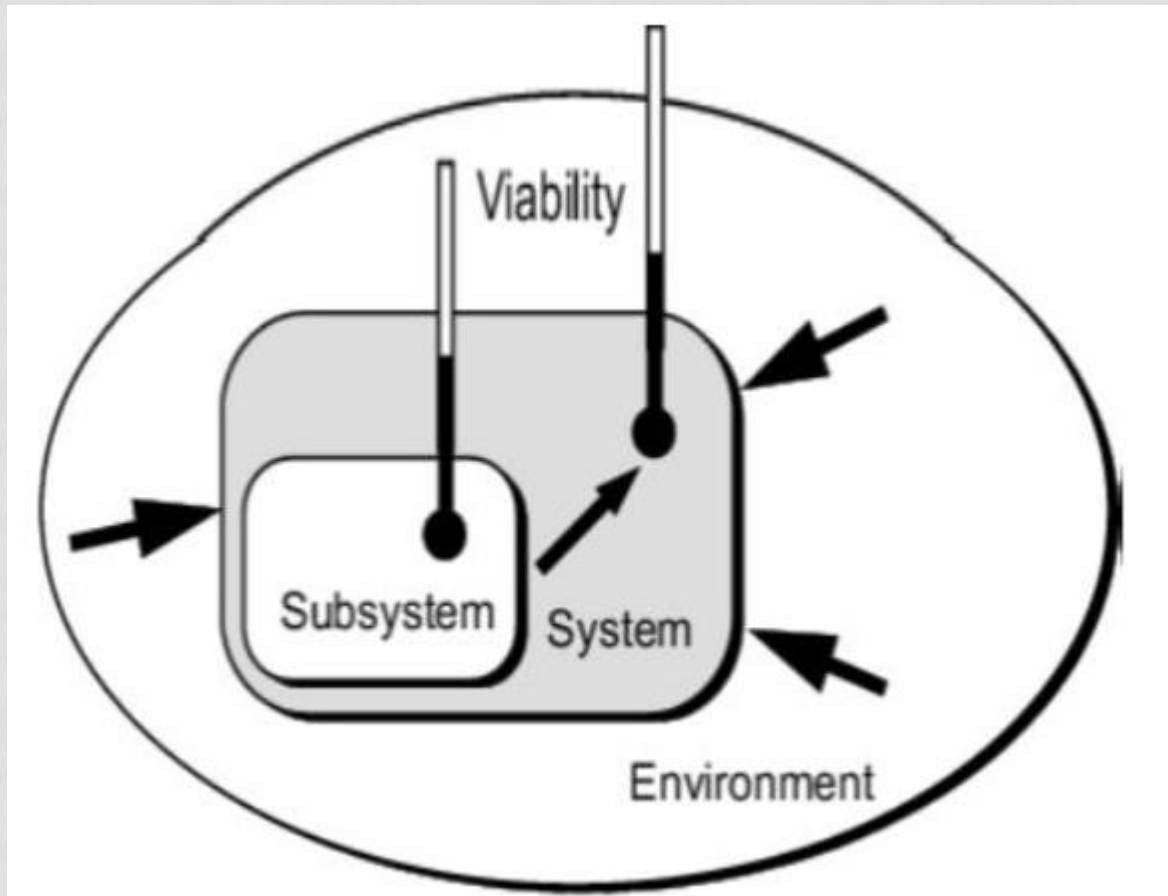
BACKGROUND: SMALLHOLDER IRRIGATION SCHEMES (SIS) AND REVITALIZATION

- SIS are vital for maintaining food security, creating job opportunities and alleviating poverty (van Averbeke, 2012; Sinyolo *et al.*, 2014; Deribie, 2015)
- Revitalization – Hardware: rehabilitate collapsed and deteriorated irrigation infrastructure - Software: crop husbandry training, markets and finances (van Averbeke *et al.*, 2011).
- Revitalization of SIS is highly affected by policy, institutional and social factors much more than technical issues.

REVITALIZATION OF SIS IN SOUTH AFRICA: NATIONAL POLICY MANDATES

- Political will – through the policy of restructuring agricultural (ANC, 1992).
- The Agricultural Policy is reflected in Strategic plans of the DAFF which is guided by the National Development Plan (NDP)
- Priorities as outlined in the MTSF 2014-2019.
- New Growth Path (NGP), Industry Policy Action Plan and Agricultural Policy Action Plan (APAP) - both National Policy Mandates agree on the critical roles that should be played by smallholder irrigation schemes (SIS)

SIS AS SUBSYSTEM WITH SYSTEM (BOSSEL, 2001)



REVITALIZATION: OBJECTIVES

current



vision



PROBLEM STATEMENT

- There is enough evidence that smallholder irrigation schemes in South Africa face number of governance challenges.
- Less is known on the impact of governance on effectiveness of revitalization of SIS.
- Dimensions of governance in the SIS entail accountability, participation, transparency and cooperation, fairness and equity (Goran and Court, 2002; Tortajada, 2010; Lautze *et al.*, 2011).
- **Categories:** Strategic and stakeholder involvement plans, Institutional settings and arrangements,
- The need to develop a proper governance framework that coordinates implementation of effective revitalization of SIS in South Africa.

MAIN AIM AND SPECIFIC OBJECTIVES

- Aim: Assessing impact of governance on effectiveness of revitalization of specific SIS in South Africa.
- Specific objectives are as follows:
 - To review strategy and stakeholder involvement plans of selected revitalised SIS;
 - To assess Institutional settings and arrangements of selected revitalised SIS;
 - To review roles of stakeholders of selected revitalised SIS;
 - To assess impact of governance on revitalization of specific SIS;
 - **To develop proper governance framework for revitalization of specific SIS.**

ROLE OF GOVERNANCE/INSTITUTIONS IN SIS

- Management, distribution and conservation of water for irrigating their schemes;
- Resolution of conflicts among members of the organisations related to the joint use of a water resource;
- Collection of water charges for operation and maintenance and payment of water user fees.
- Plan interventions on the schemes; the implementation of agreed and supported interventions,
- Management and control of resource allocations for implementation of their planned investments and procurement of essential services for irrigation development (FAO, 2005).

ROLE OF GOVERNANCE/INSTITUTIONS IN SIS.....

- **Institutions** –“configuration of legal, policy, and organizational rules, conventions, and practices that are structurally linked and operationally embedded within a well-specified environment” (Saleth and Dinar, 2004).
- **Institutional arrangement** - set of rules or agreements governing the activities of a specific group of farmers pursuing irrigation activities.
- From the **national to individual irrigator's levels**.
- These include national and provincial departments, non-government organisations, and private companies involved in irrigation, water authority, water users associations and water users.
- **Institutions aim** - setting principles for allocating water to existing and prospective users; enable the public to participate in managing the water resources; ensuring accommodation of the needs and expectations of existing and potential water users.
- They should be **developmental in nature** while ensuring the sustainable use of water resources in their area of operation (Karar, 2004)

REVITALIZATION: STRATEGIC AND STAKEHOLDER INVOLVEMENT PLANS

- **Organisational strategy:** mission and vision - realistic objectives and objectives - in line with government obligations, clear to all stakeholders and flexible.
- **Organisational management:** capability of Irrigation Management committees, competent bodies providing overall direction, ability to face challenges, making feasible decisions.
- **Organisational structure:** appropriate organizations/agencies - clear authority, roles and responsibilities. Structure - supports effective implementation of both old and new projects.
- **Linkages/networks:** relationships (e.g., funders, competitors and rivals).
- **Legal and political framework:** linked to official policy, political support - stability in local and national stakeholders.

REVITALIZATION: ROLE OF STAKEHOLDERS

- Clarify role of stakeholders in revitalization of SIS (based on Stakeholder Involvement plan):
 - National Departments (DAFF, DWS, DRDLR, etc.)
 - PDs
 - District
 - Local
 - Private/strategic partners

NOTE: stakeholders should contribute in relation to access to land, water, other variable inputs and capital (Human, Physical, Natural and Social)

GOVERNANCE DIMENSIONS AND INDICATORS

- Measure impact of governance based on the following dimensions:
 - Participation – O&M, Decision making
 - Accountability – leaders accountable to members, free flow of information, trustworthy
 - Conflict management – resource allocation, over leadership, inputs and marketing, capacity to manage conflicts, graduated sanctions
 - Transparency and cooperation – all levels of governance
 - Equity and Fairness – allocation of resources to rightful users
 - Sustainable use – mechanisms to supply water adequately (now and future)

PERFORMANCE MEASURES

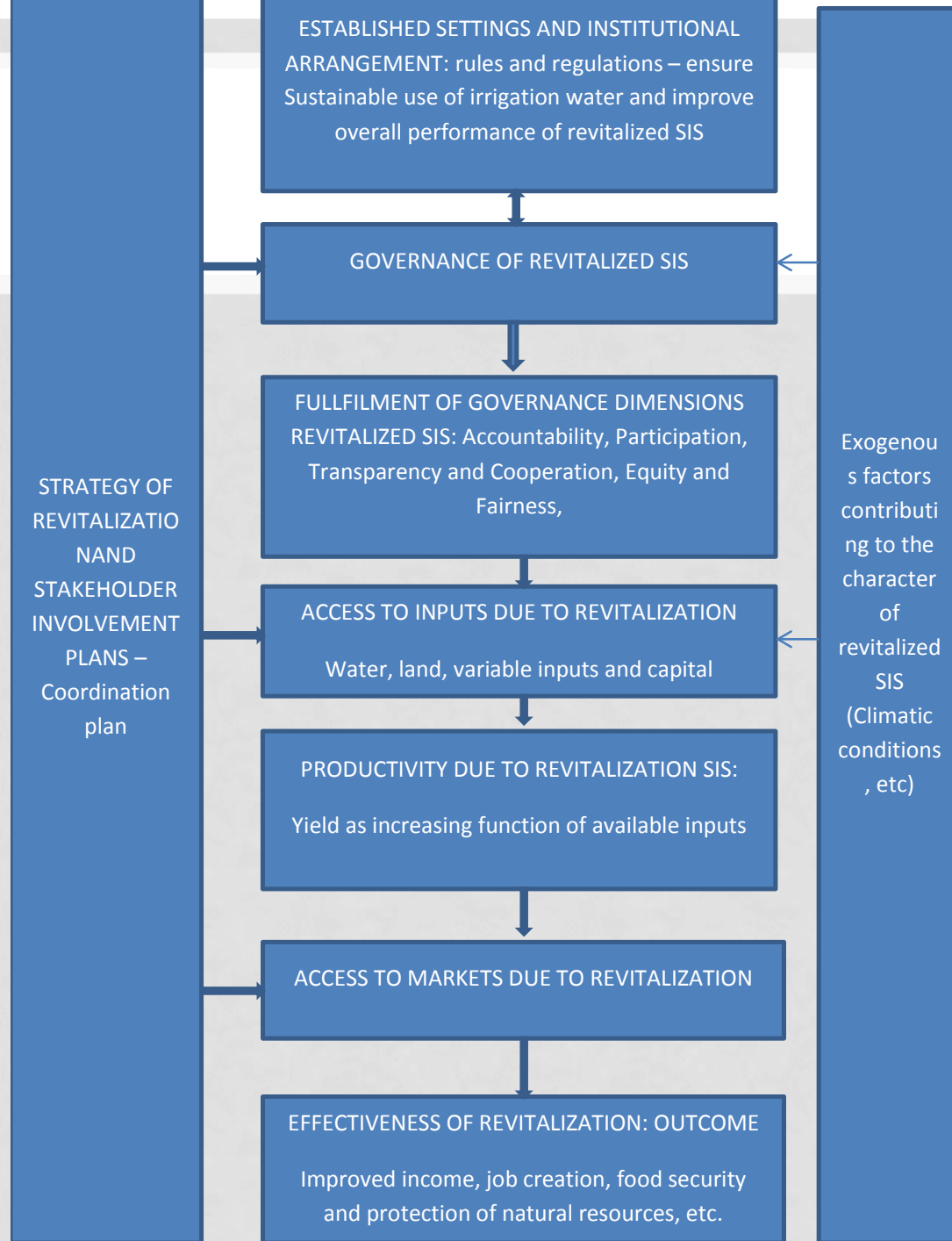
- AGRICULTURAL PRODUCTIVITY

Yield as an increasing function of:

- Water
- Land
- Variable inputs
- Capital – Human, Physical, Natural and Social

ASSES PERFORMANCE OF REVITALIZED SIS

- GOVERNANCE DIMENSIONS VS AGRICULTURE PRODUCTIVITY
 - Assess impact of governance on revitalised SIS
 - Hypothesis 1– governance dimensions and selected indicators directly impact access to water in revitalised SIS.
 - Hypothesis 2- Some of governance dimensions and indicators directly or indirectly impact performance of revitalized SIS.
 - Using approaches deployed by reviewed literatures (Gliem and Gliem, 2003; Akuriba *et al.*, 2017; Sullivan and Artino Jr, 2013)
 - The Cobb-Douglas Production function to handle multiple inputs (Bhanumurthy, 2002; Akuriba *et al.* 2017)



REVITALIZATION SHOULD BE OUTCOME BASED

THANKS!

