

How can multiple water use services help
mitigate the impacts of COVID-19?

SMART Irrigation SMART WaSH in support of
food security and health

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Outline

Motivation

Approach

Results and conclusions

Managing water for food
and public health



Motivation

COVID-19 impact on food security and health sectors

Need to improve irrigation sector for food security

Need to improve WaSH sector for health

Growth in water use to comply with needs

Number of poor people
20 %
higher than pre-pandemic



40%
people without basic
hand-washing facility

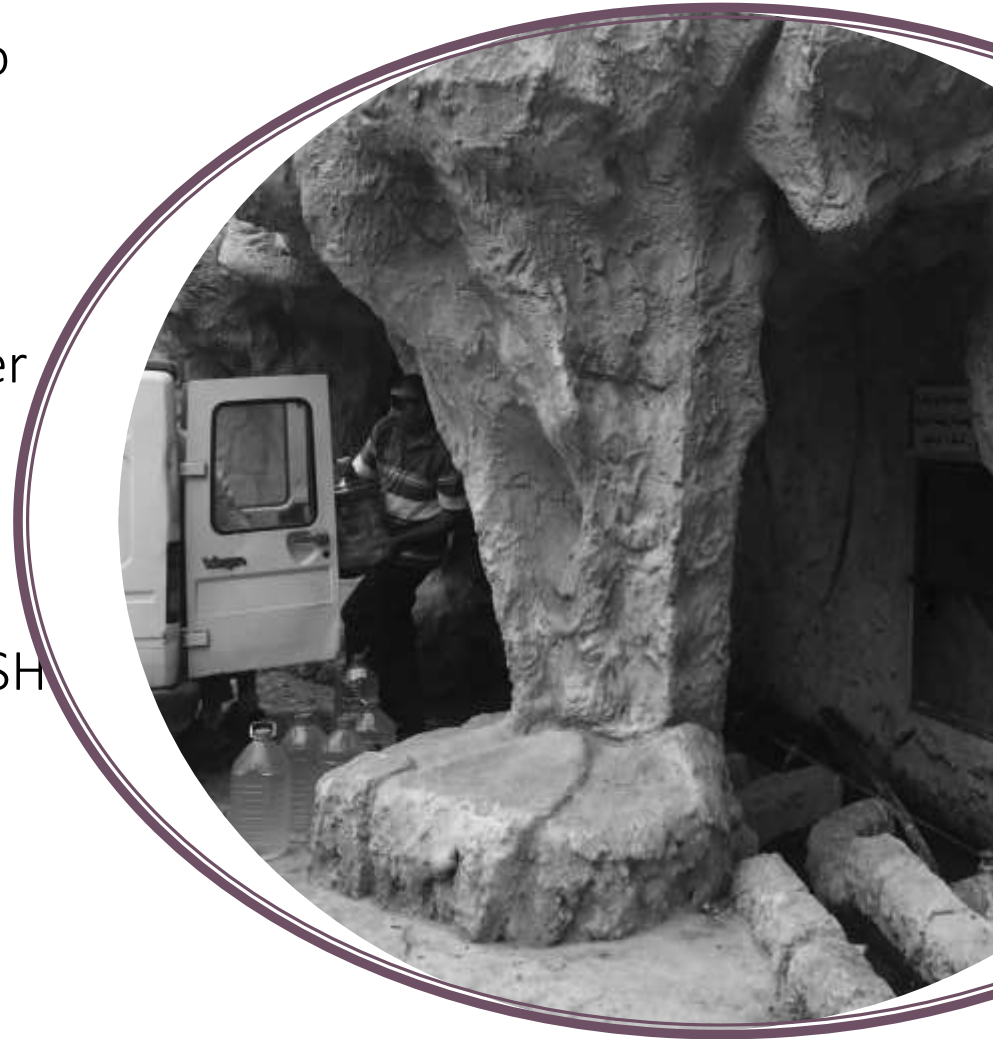


Motivation

Potential of multiple water use to respond to increased water need

Spill-over effect of irrigation water saving on health sector

SMART – Irrigation SMART – WASH approach to mitigate COVID-19 impacts in Africa



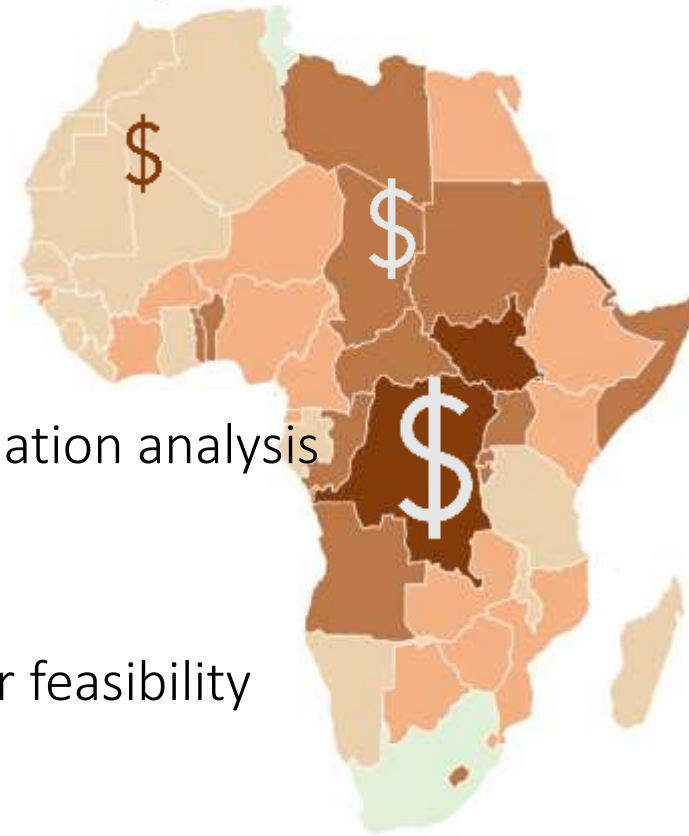
Approach

Composite indicator analysis to identify geographical hotspots

Clustering to define investment approaches

Definition of investment criteria based on situation analysis

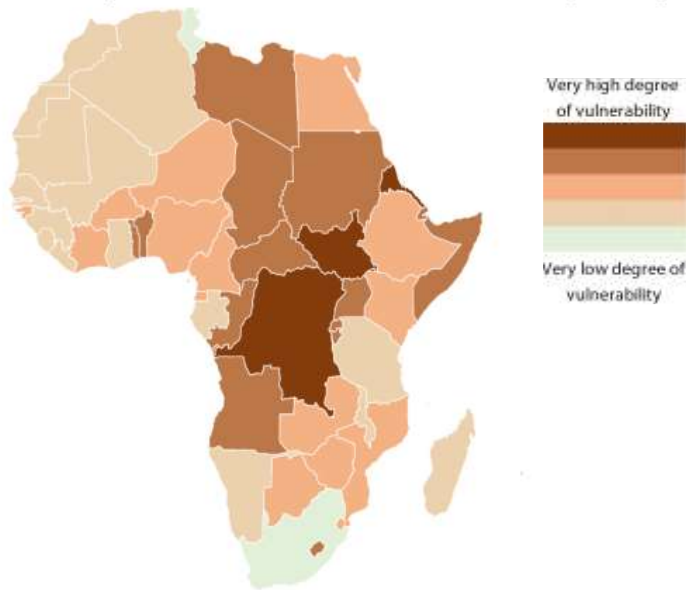
Review of existing MUS technologies and their feasibility



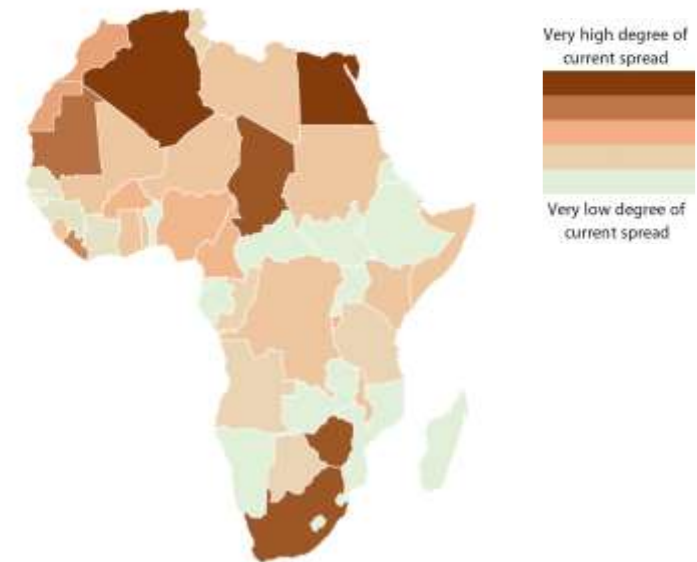
Weak overlapping amongst risks

1. Results of composite indicator analysis

Food insecurity and health vulnerability map



Current situation of pandemic spread with fatal outcome*



* as per June 2020

Country groups with different needs

2. Results of clustering

Cluster 1 –
Food security
group



Cluster 2 –
Redistribution
group

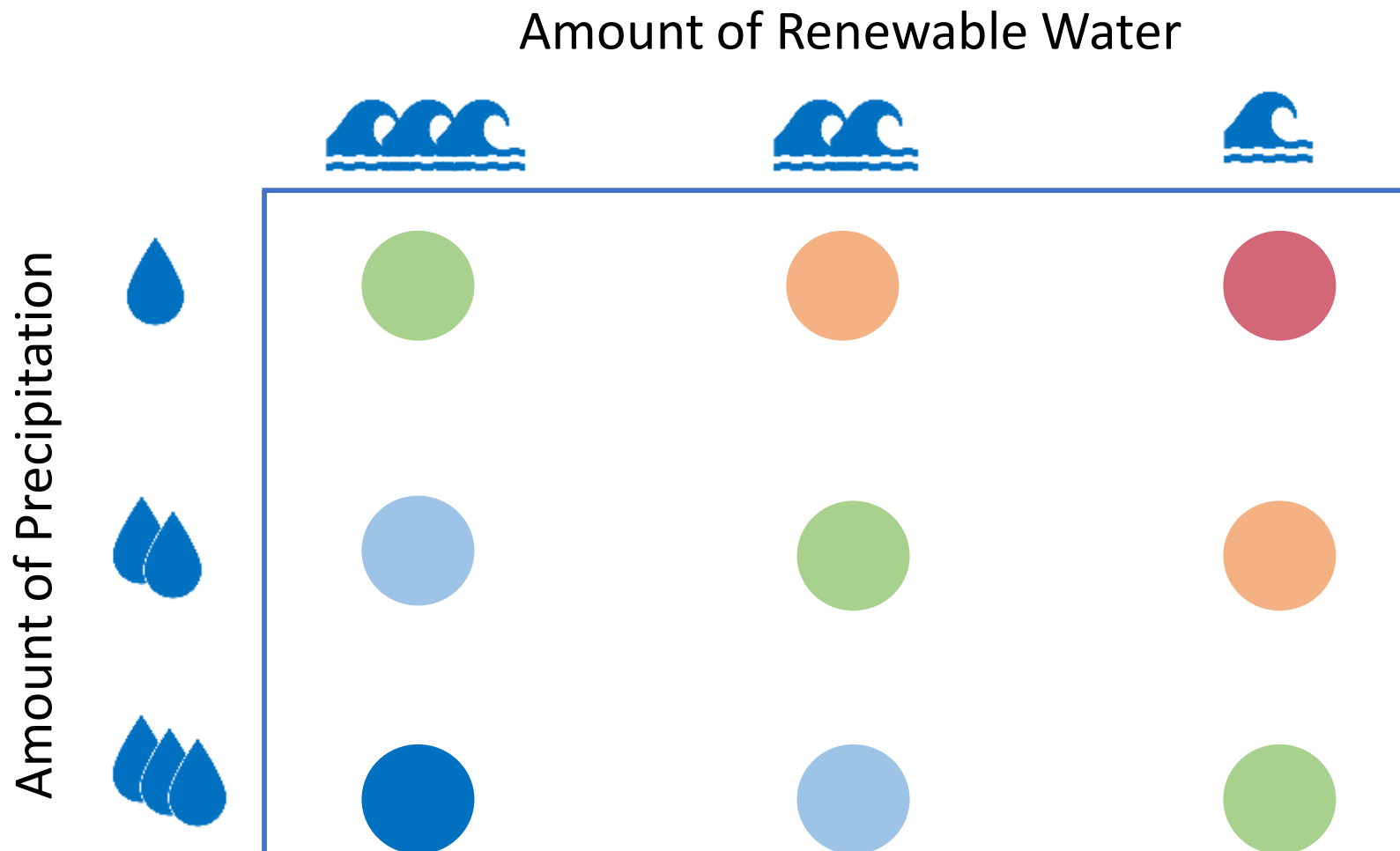


Cluster 3 –
WASH group



Investment based on resource endowment

3. Investment matrix for multiple water use

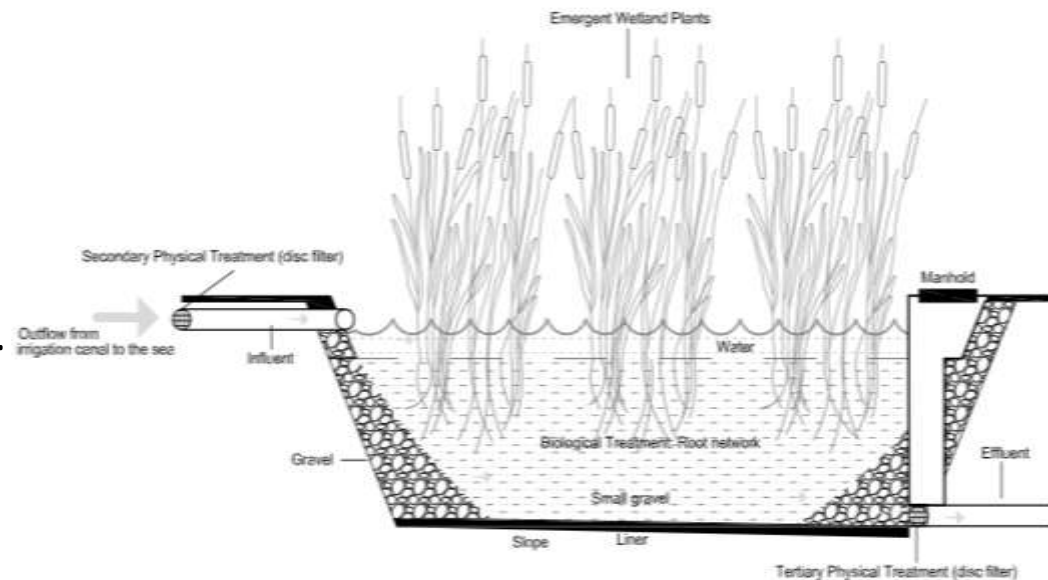


Technologies fitting to the conditions

4. Review of technologies

Water tower group, i.e. infiltration galleries, floodplain use etc.

Water management group, i.e. check dams, constructed wetland etc.



Rainfall management group, i.e. rainfall harvesting ponds, cisterns etc.

Water scarce group, i.e. fog harvesting, desalination etc.

Managing water for food and public health

Distinct COVID-19 impacts on countries

Investment strategy to explore the needs and available resources

MUS for supplying water for food security and health, without trading-off the needs

MUS potential and feasibility yet to be exploited in Africa

No “one-size-fits” solution in terms of technology

Translating theory to practice: 14 million USD pipeline approved as first step of SMART – Irrigation SMART – WASH portfolio

For FAO discussion paper on **SMART Irrigation SMART WaSH**
please [Click Here](#)

Thank you for the attention