



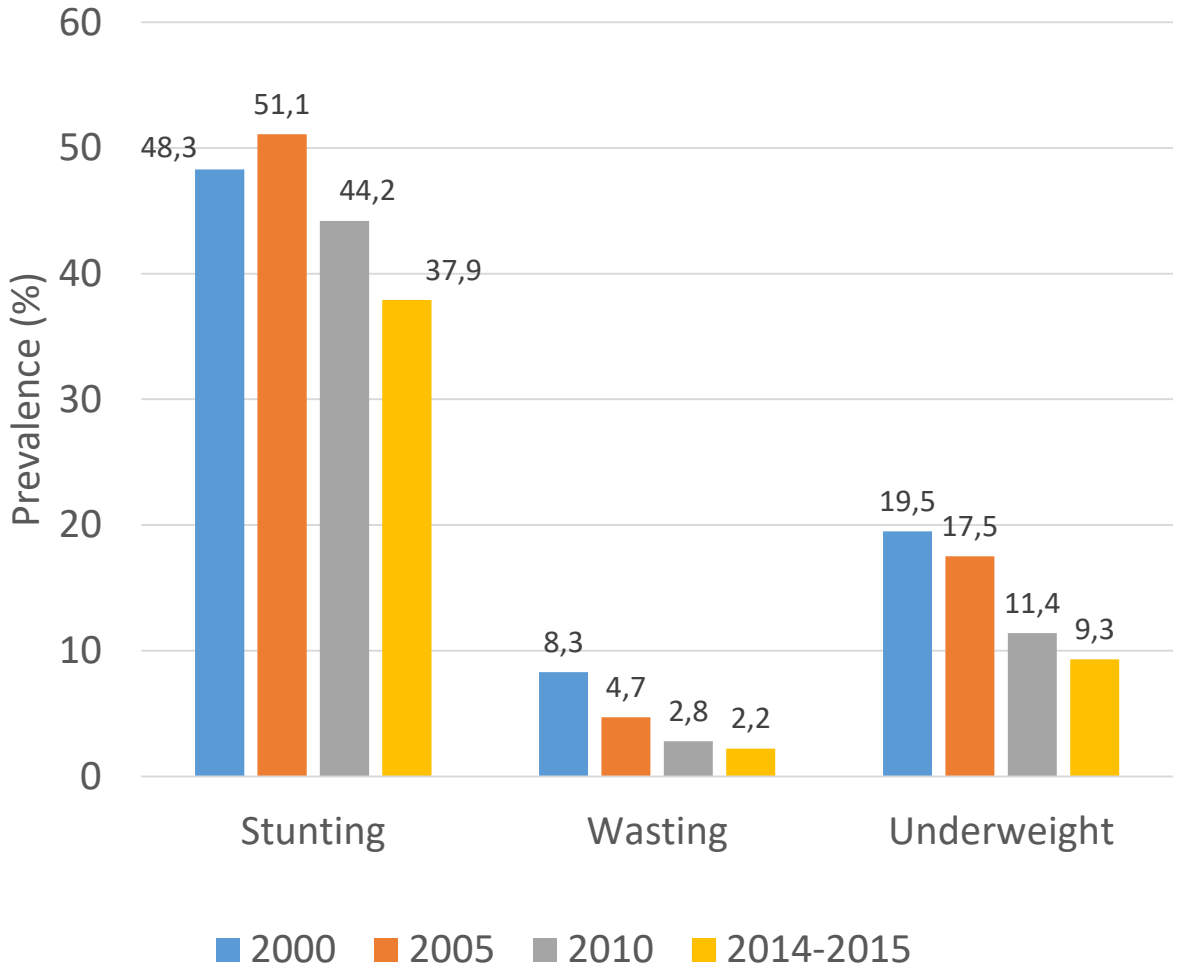
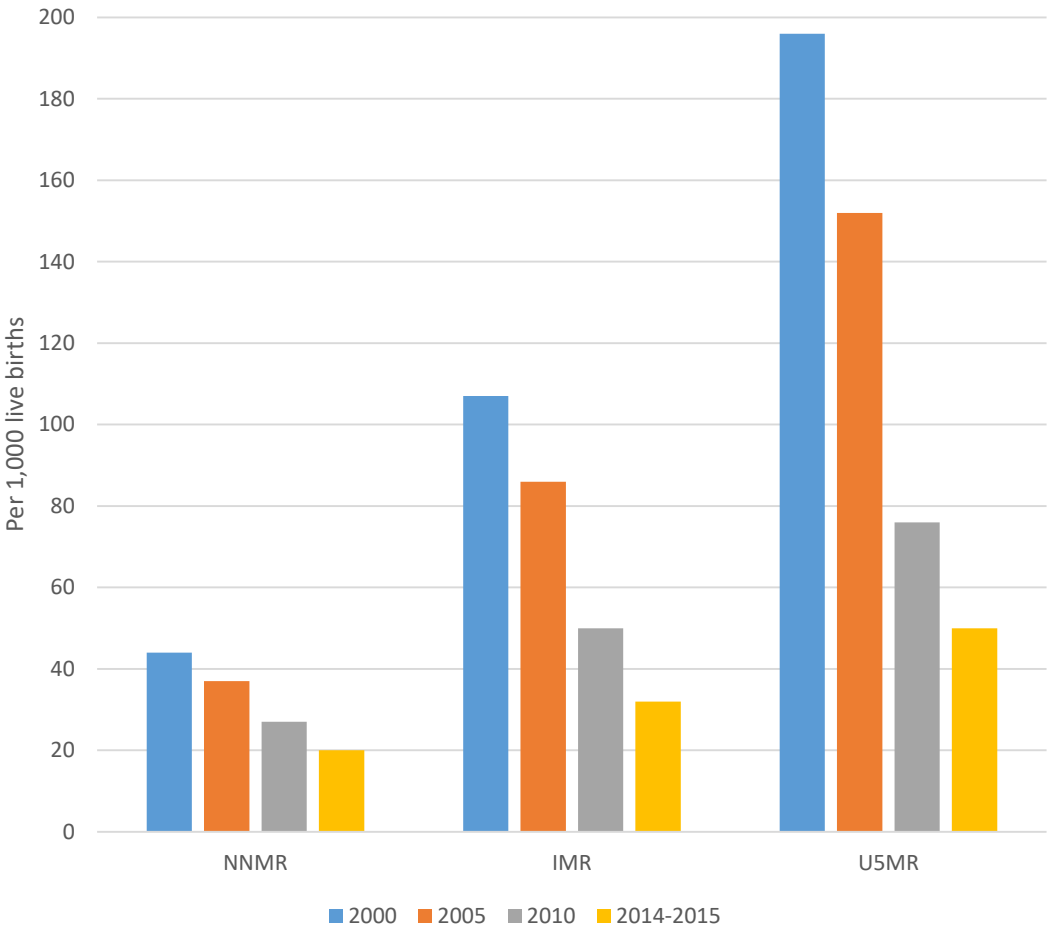
Food security, stunting, and sustainable irrigated agriculture - Rwanda case study

August 29, 2018



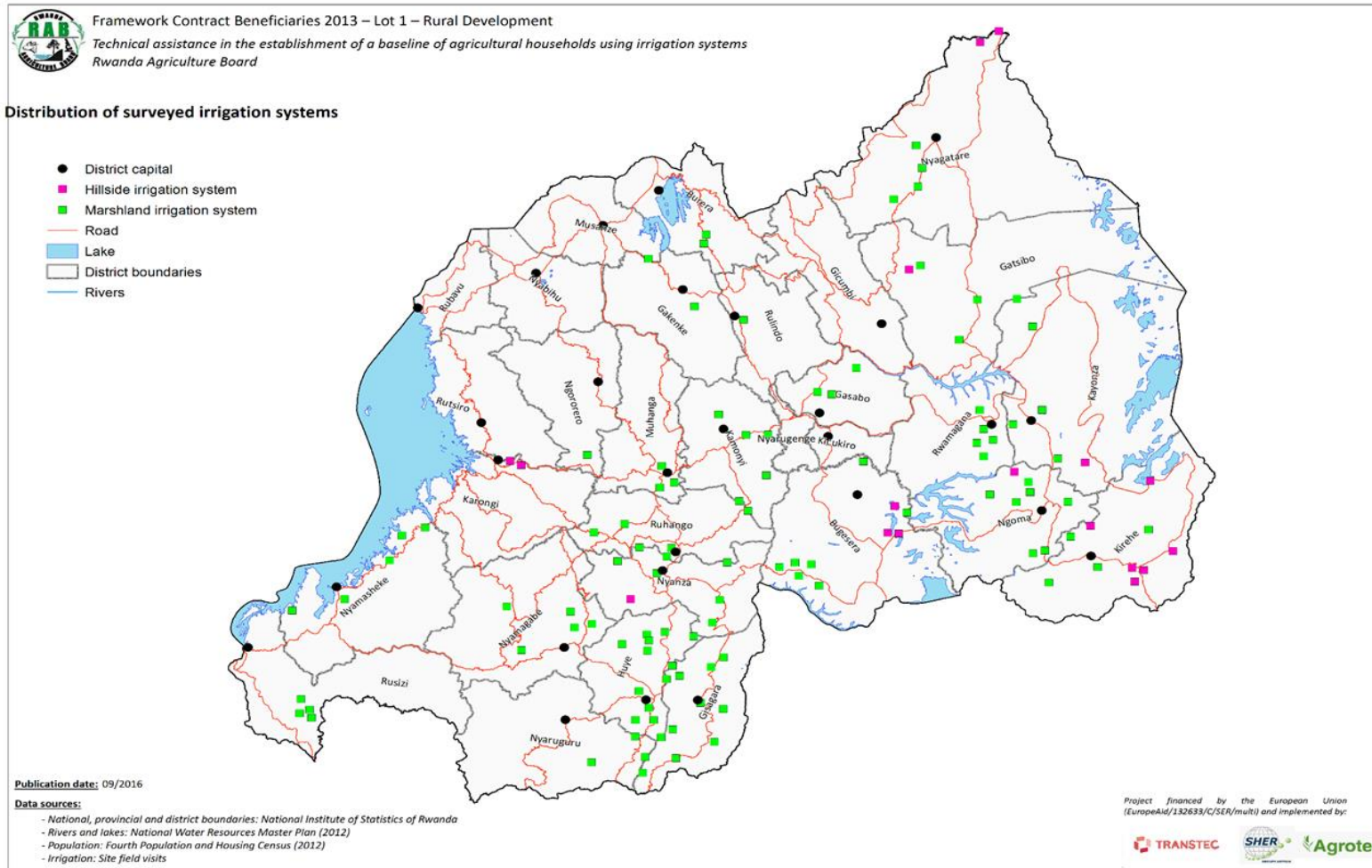
Aimee Mpambara

RWANDA HAS MADE EXCELLENT PROGRESS ON <5 MORTALITY AND ACUTE MALNUTRITION (WASTING), BUT PROGRESS ON STUNTING REMAINS MODEST



Source: Rwanda Nutrition Situation Analysis, World Bank

Irrigation in Rwanda



- 589,711 ha of irrigation potential
- 48,508 ha irrigated (7.5 percent of potential)
- Cost of irrigation has been the main constraint to irrigation development

Challenges to irrigation development in Rwanda

- High cost of irrigation
- Small and fragmented private lands
- Inadequate capacity within public and private sector
- Lack of irrigation culture within communities
- Undeveloped and inefficient marketing chains
- Low performance of existing irrigation infrastructures
- Water inefficiency in irrigation systems



Proposed solutions to the challenges

- Small scale irrigation supported by government
- Land consolidation
- Capacity building for farmers groups, private sector and extension agents
- Improvement of existing irrigation infrastructures for better water efficiency

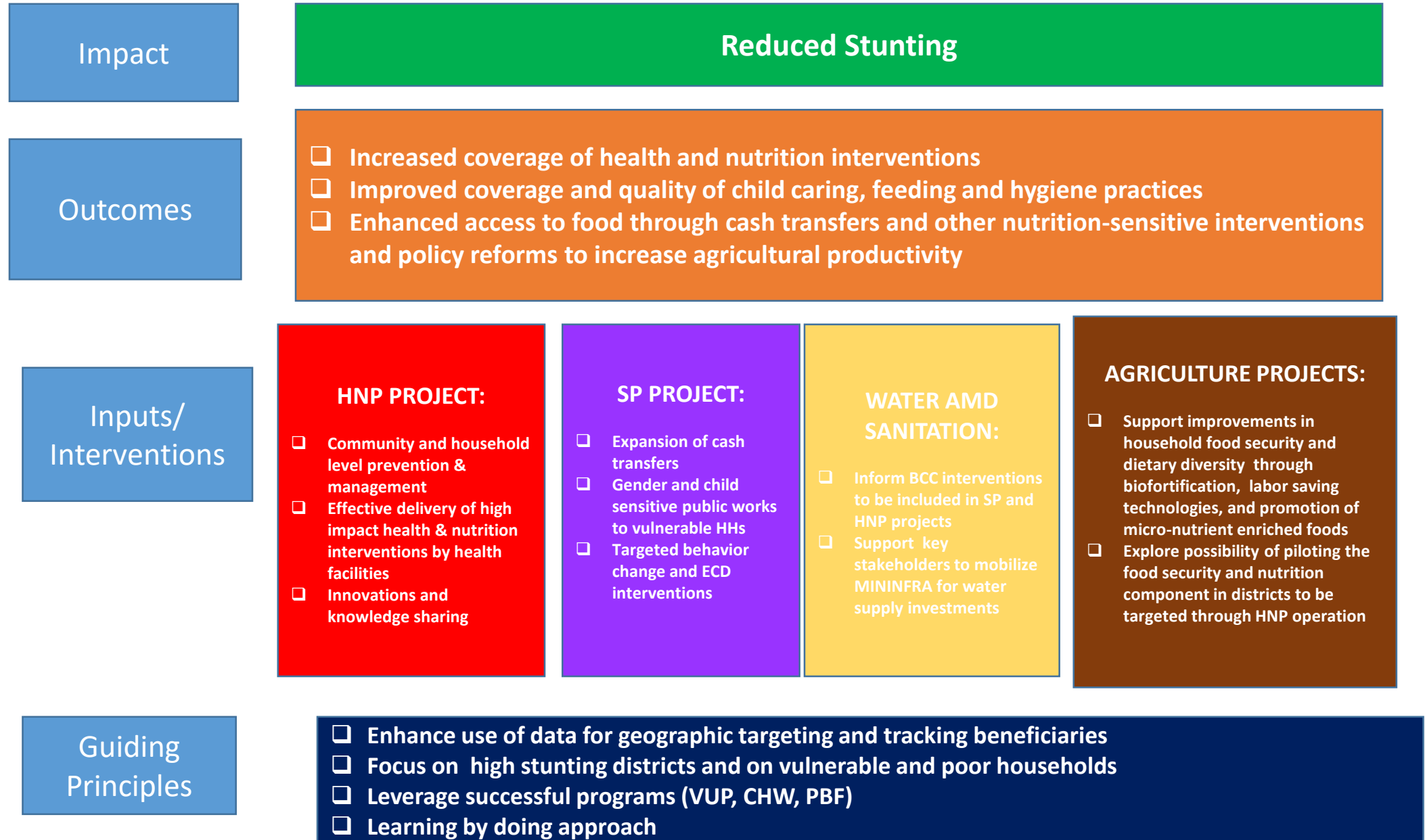


Nutrition in irrigation projects

- Peer learning : nutrition messaging and education provided in the self help groups
- Access to nutritious food : kitchen gardens, horticulture development, fish farming in dams,
- Nutrition through increased income : horticulture and market access



THEORY OF CHANGE FOR AN INTEGRATED PROGRAM



Agriculture contribution to the Stunting Reduction Program

Access Pathway

- **Increase the production of nutritious food**
 - - Biofortification
 - - Diversification of agriculture production
 - - Kitchen gardens
 - - Small livestock (also inputs to agriculture) and fish farming (in dams)
- **Capacity building, peer learning about improved nutrition**
 - - Use of existing agriculture extension models and self help groups
 - - Women targeted interventions

Income Pathway

- **Ⓢ Increase marketing of nutritious food:**
 - - Support marketing of biofortified food (iron rich beans, vit A rich potatoes)
 - - Support marketing of other diversified food: vegetables, animal source protein
- **Other income generating activities**
 - - Linking cooperatives to markets to increase farmers incomes

Key considerations

- Collaboration with other sectors is key
- Bring farmers on board early enough
- Listen to farmers, understand them, and adapt

