

Introduction

- Analysis of land use practices by young farmers reveal contradictions between the potential for increasing agricultural productivity through new/young farmers and the resultant land uses of young farmers;
- New/young farmers are encouraged to transition into agribusinesses through technology adoption, diversification, and new markets; but there is limited focus on the adaptive capacities and sustainability of the new farmers, farms, and landscapes;
- Most of the systemic challenges in the agrifood sector, such as land tenure, agricultural information, climate change and policy have double effects on young farmers;
- To effectively account for the contribution of new/young farmers to food security, we must also critically analyse the land use changes resulting from the prevailing narratives and equally promote sustainable agriculture among young farmers.



Aims & Methods

We assessed how young farmers understood the need to adopt sustainable farming practices; the extent to which they were adopting these practices; and finally, evaluated the implications of their practices on food security and youth employment in Kenya. We collected qualitative data through interviews and field observations of 60 purposively sampled young farmers in Western, Eastern and Central Kenya. Using NVivo, we analysed four key themes in young farmers' practices:

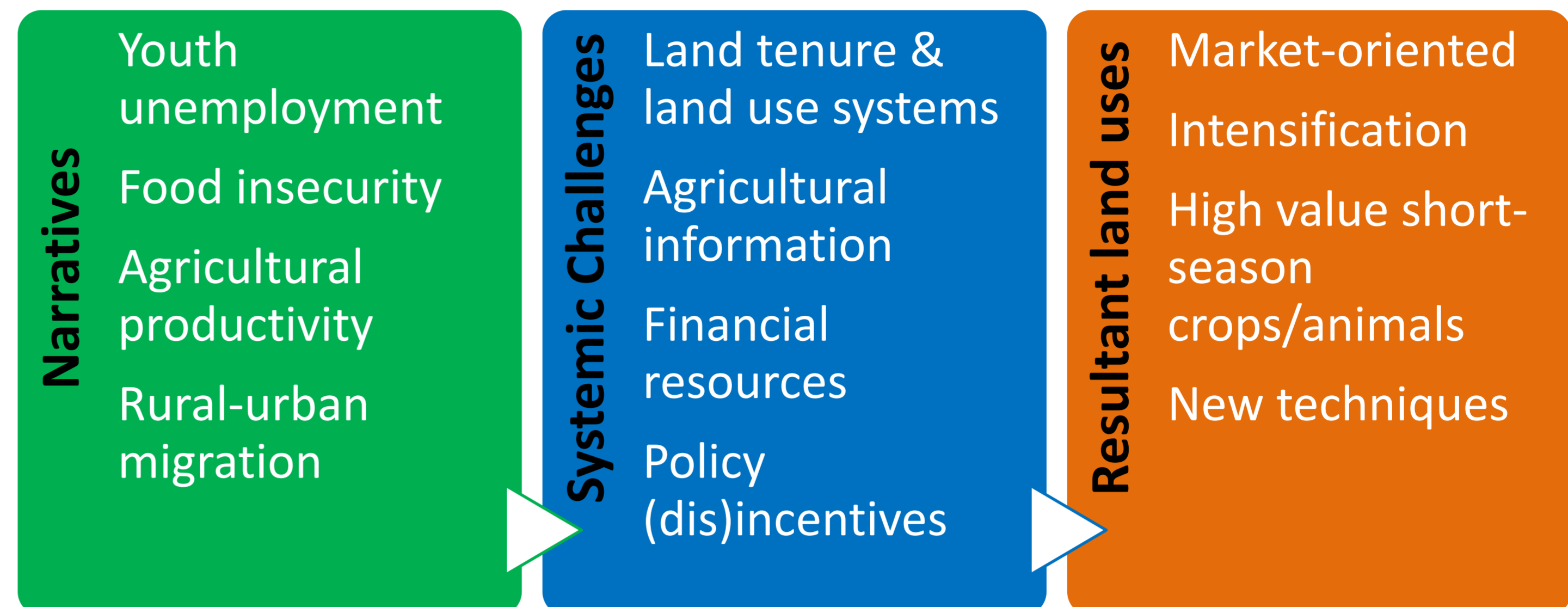
- Land use changes** (being the understanding of and changes in land use patterns with the entry of young farmers in smallholder agriculture);
- Water conservation strategies** (being the factors considered in water conservation and management strategies);
- Soil fertility approaches** (being how young farmers understood and practiced fertility measures on their farms) and;
- Awareness of biodiversity and ecosystem services** (being the extent to which they were aware of the implications of their activities on biodiversity and ecosystem services).

Conclusions

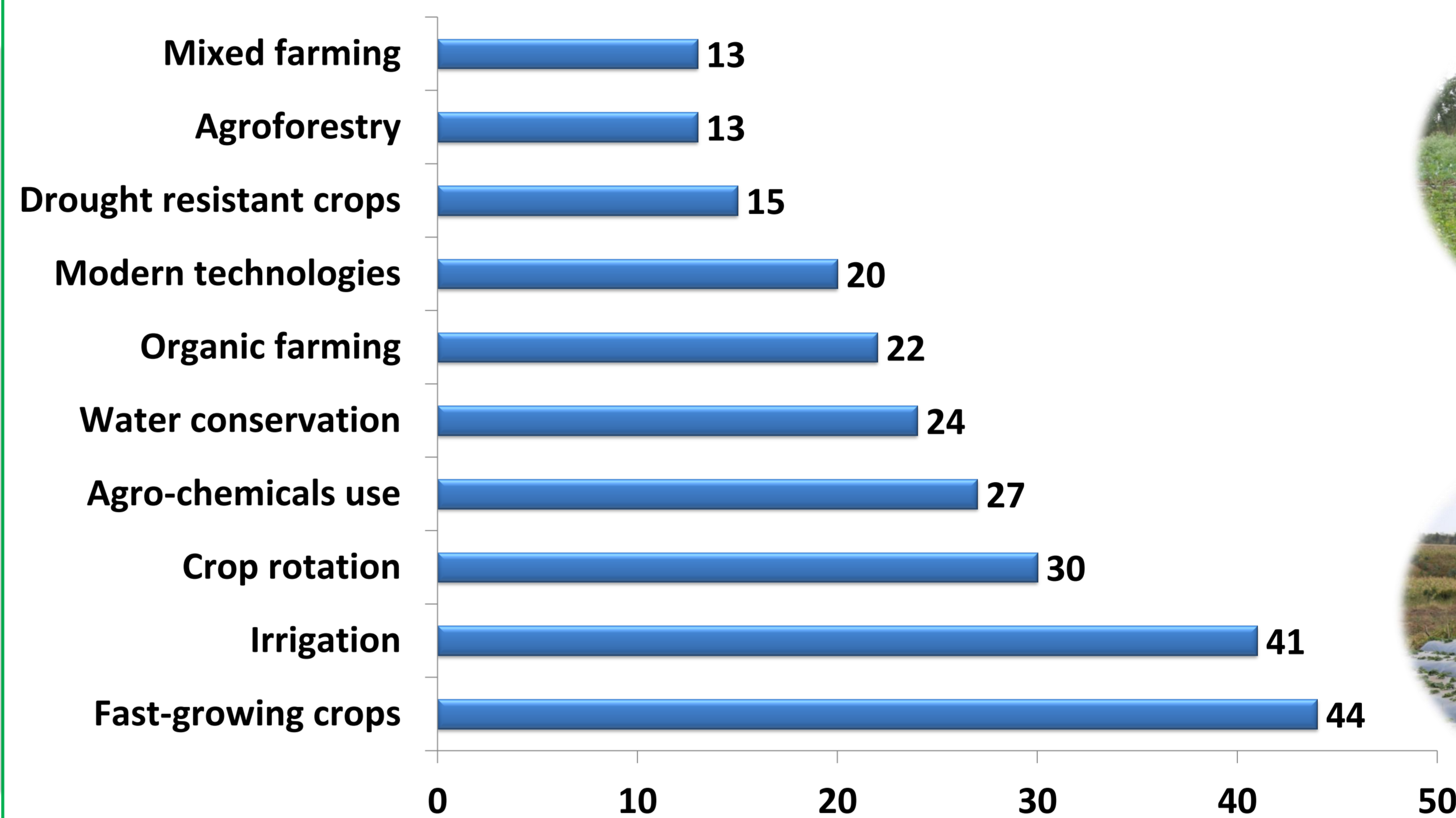
- Young farmers lead to increased food production over a short period of time; but this is often at the expense of soil nutrient and water resources, meaning possibilities of future loss of land fertility;
- Production of horticultural foods might affect staple food production in the long-run;
- Young farmers' might exacerbate land degradation and biodiversity loss, and also will be affected by the impacts of climate change on agriculture if their current practices are not sustainable;
- Further research is required to analyse the factors of (un)sustainability of new/young farmers' land uses and their implications on food security and youth employment in Kenya.

Narratives & Controversies

An illustration of the contradictory narratives, realities, and resultant changes in youth and agriculture in Kenya



Selected young farmers' practices



Comparison of awareness & practice



Variables	Awareness	Practices
Land use changes	Land inaccessibility; Labour-intensive agriculture; Land degradation; Capital investment; Agricultural information ; & Urban food market demands	Irrigated agriculture; Land leasing; Crop/Animal intensification; Intensive use of agro-chemicals; & Greenhouse farming
Water Conservation and Management	Water scarcity; Changing rainfall patterns; Water as a public good; & Water-related risks- floods; hailstorms; drought etc.	Water harvesting; Drip irrigation; Furrow irrigation; Timing planting/breeding seasons; & Drought-resistant crops
Soil fertility	Soil testing ; Soil diseases; Soil nutrient balancing; & Fertilizer subsidies	Organic fertilizers; Chemical fertilizers; Crop rotation; Fertilizer trees; & Erosion control
Biodiversity and ecosystem services	Certification ; Trees on farm; Soil fertility and water as factors of production (& not ecological); & Policy (dis)incentives	Indigenous crops; Integrated pest management practices; Agroforestry; Organic farming; & mixed farming systems

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