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FINDINGS FROM AN IMPACT ASSESSMENT OF KENYA TREE FRUIT PROJECTS

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TOPICS

1. Background of the study
2. What were the projects designed to do?
3. What Happened?
4. Summary

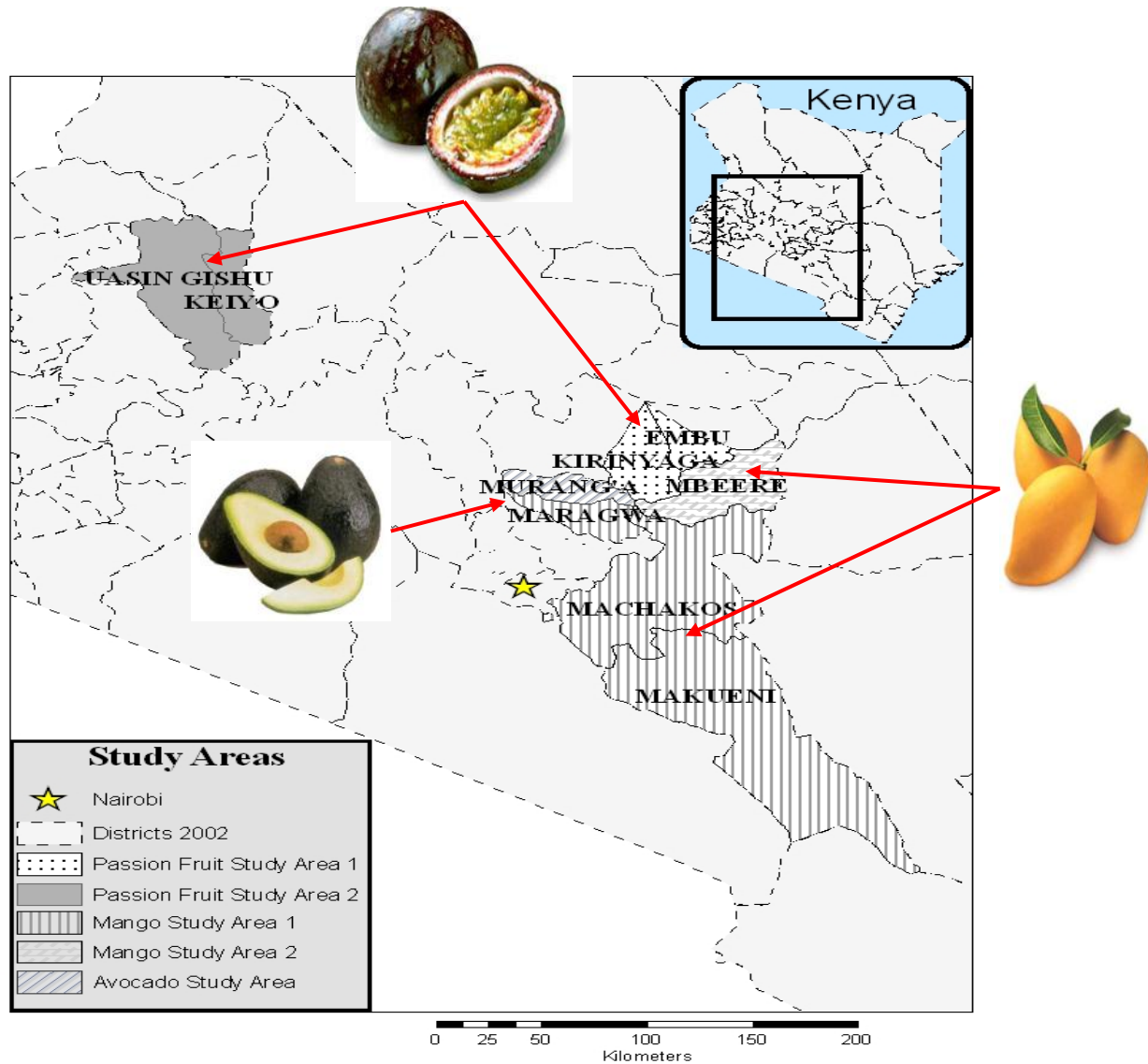
Background of the study

- Assessment focused on components of two USAID-funded projects
 - Kenya Business Development Services (KBDS) : [EMG],
 - Kenya Horticultural Development Project (KHDP): [Fintrac]
 - focus on tree fruit activities only; not assessment of entire projects
- Study assesses impact of projects on:
 - *competitiveness* of mango, passion fruit, and avocado value chains
 - *integration* of smallholder farmers into these value chains
 - *access to product/service markets* for smallholder farmers
 - *smallholder performance and upgrading*
 - *rural household incomes*

Research design

- Mixed methods
 - Quantitative survey
 - In-depth interviews
 - Focus group discussions
- Sample
 - 1,640 tree fruit farmer households in five production areas
 - 100 other actors in the value chain
 - used “participant” and “control” groups within the sample
- Baseline: Dec 2004/Jan 2005; End line: Dec 2006/Jan 2007

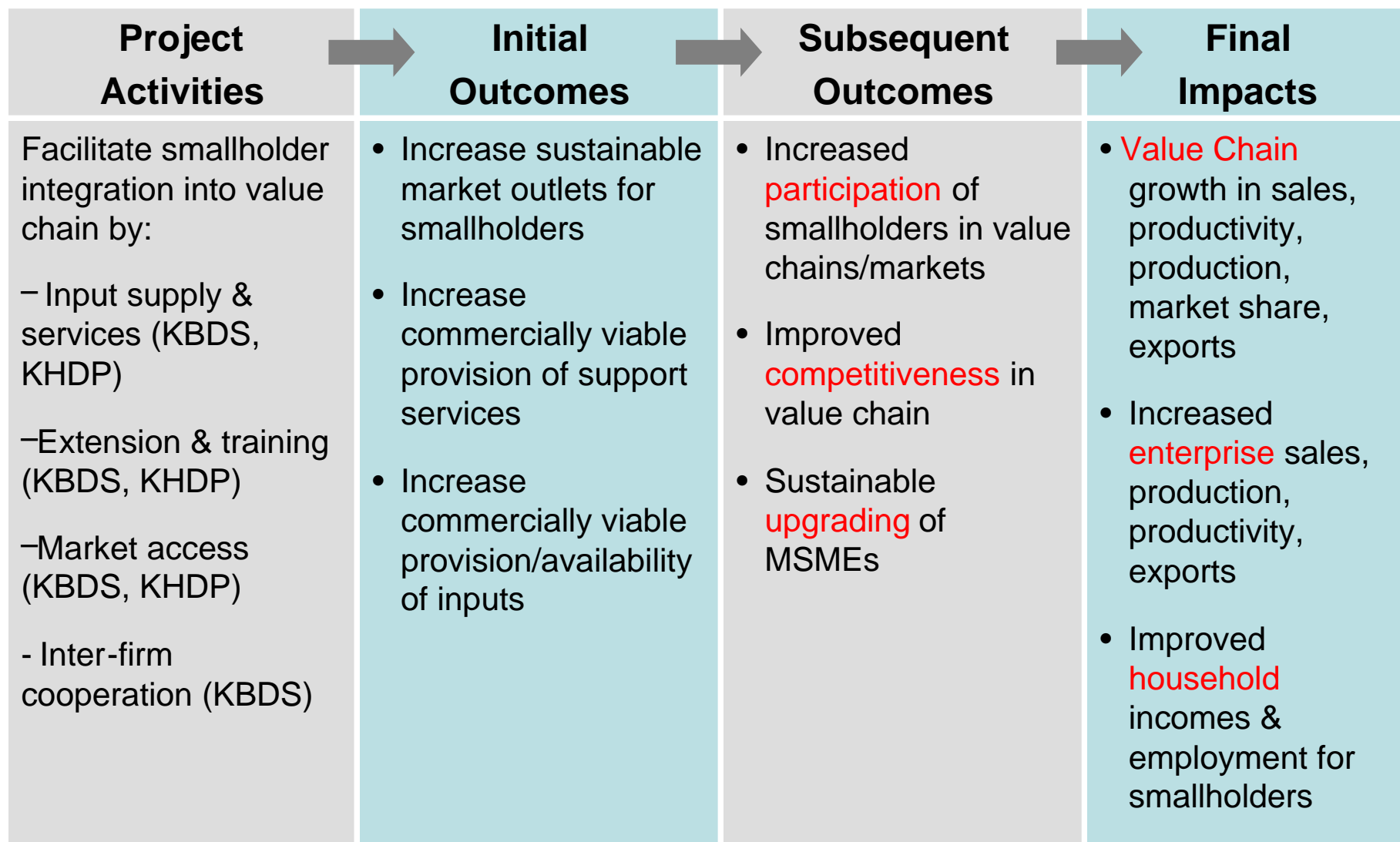
Location of Study Areas



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Causal Model of Tree Fruit Projects in Kenya



Key Hypotheses of the Study

Hypothesis 1: Project activities in value chain contribute to *greater integration between smallholders and lead firms*

Hypothesis 2: Greater integration between smallholders and lead firms contribute to *improved enterprise performance & household well-being*

Hypothesis 3: Greater integration between smallholders and lead firms contribute to *sustainability of impacts through increased investment and upgrading* in smallholder enterprises

Hypothesis 4: Greater integration between smallholders and lead firms contribute to *growth and competitiveness* of value chain

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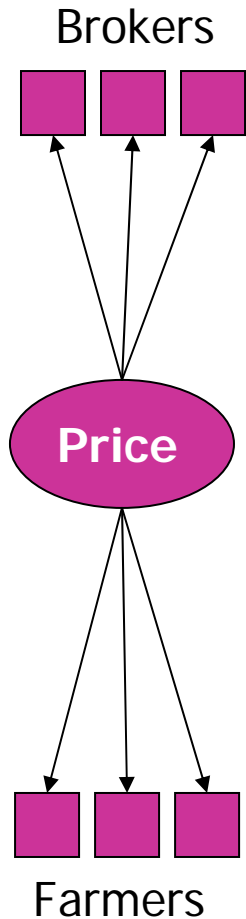
Findings Hypothesis 1:

Greater integration of smallholders into tree fruit value chain

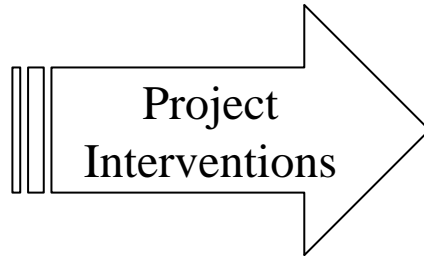
- Closer relationships between smallholders, lead firms, other providers, enables value chain to respond effectively to end market opportunities
- Projects attempted to create closer relationships via farmer group mobilization, linking to lead buyers and support markets, and inter-firm cooperation
- Trust issues remain (avocado) but some relationships still new (passion fruit central)
- Passion fruit and avocado farmers shifted to more “directed governance” structure through contract sales, embedded/linked services

Shifting Value Chain Governance: Kenya Tree Fruits

Market-based

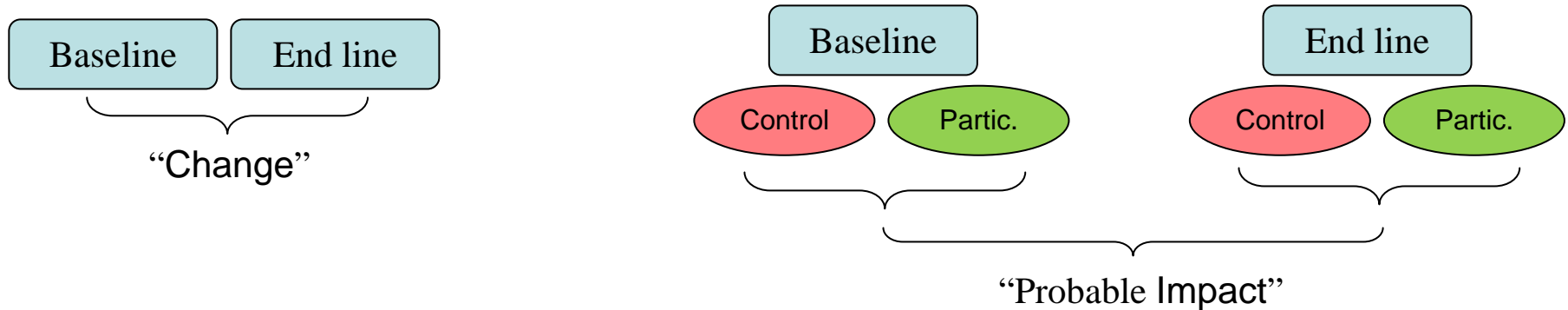


Directed



- ✓ Project interventions facilitate upgrading of smallholders
- ✓ Intervention outcomes contribute to shift from market-based to directed governance
- ✓ Directed governance currently characterizes export veg. in Kenya; more than tree fruits

Findings Hypothesis 2: Contribution to enterprise performance



- Production:
 - increases (change) in all program areas
 - probable impact for Avocado and Passion Fruit Central
- Productivity:
 - increases (change) in all program areas
 - impact of projects unclear
- Sales:
 - increases (change) in all program areas except Passion Fruit Rift
 - probable impact for Avocado and Passion Fruit Central

Findings Hypothesis 2: Contribution to enterprise performance (cont.)

- Upgrading:
 - extensive planting of new passion fruit vines; less so for avocado
 - some avocado farmers shifted to production of Hass variety (for exports), but most continued producing Fuerte variety (for domestic/processors)
 - more than half reported receiving useful technical advice
- Productive assets:
 - increases (change) in productive assets in both passion fruit areas
 - impact of projects unclear
- Other:
 - little difference between men and women or across poverty groups in impacts on enterprise performance
 - wider availability of cell phones, but value of “access to market information” index did not increase

Findings Hypothesis 2:

Contribution to household well being (all areas)

INCOME SOURCES: tree fruits important source of household cash income

- overall, 64% of participants, 41% of control households ranked tree fruit income as most important source

INCOME LEVEL PROXIES

- Consumption:
 - change indicated but insufficient data to measure impact
- Household Assets:
 - positive impact on assets. Project participants higher “Asset Index” than controls at both the baseline and end-line



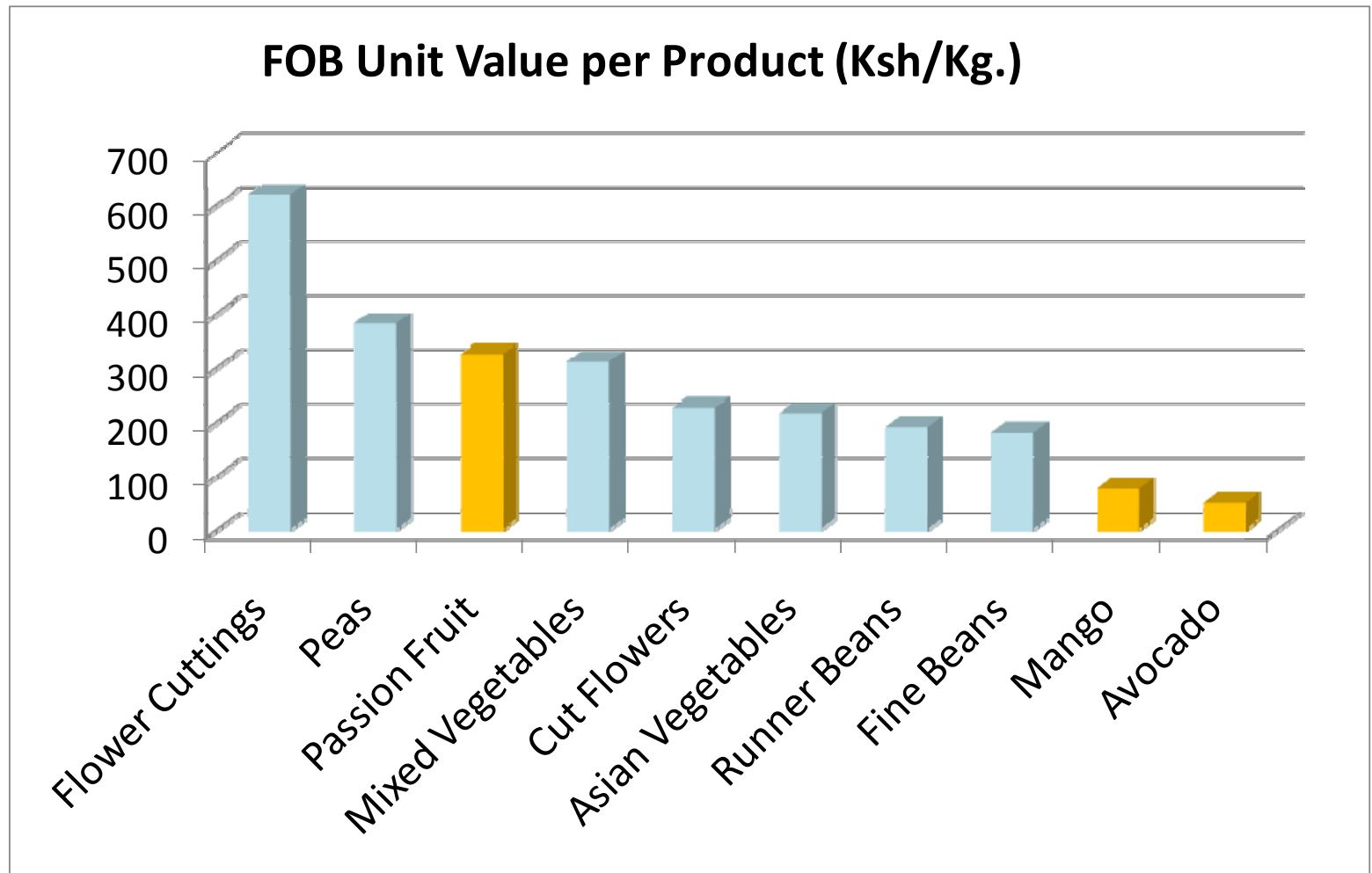
Findings Hypothesis 3: Contribution to investment/upgrading of tree fruit enterprises

What farmers are doing now to realize impacts in the future:

- working toward EUREPGAP certification
- investing in productive assets
- product/process upgrading to improve future competitiveness of Kenya in export markets



Comparative Horticultural Product Values (2004)



Source: *Marketing News* – March 2005 (from HCDA /Customs data); KHDP

Incentives to Invest/Upgrade: Tree Crops vs. Vegetables

Characteristics	Tree Crops	Vegetables
Value	Lower Value	Higher Value
Harvest	Annual Harvests	Grown/ Harvested all Year
Size	Larger	Smaller
Scale of Production	Lower	Higher
Farmers	Older, Retired	Younger, Wealthier

- passion fruit has characteristics closer to vegetables
 - may contribute to greater commercial potential than avocados and mangos

Findings Hypothesis 4:

Contribution to growth and competitiveness of value chain

- Growth
 - limited growth in production/export of tree fruit, except small increase in avocados. Weather and disease appear to have been factors
 - new avocado processing enterprises offer new market outlets
 - limited growth of tree fruits vs. vegetables and flowers
 - Competitiveness
 - no evidence whether Kenya increased its market share in export markets
- ** Cannot measure impact on competitiveness and growth; but little evidence of positive change in Kenya's growth and competitiveness

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Summary – Enterprise and Household Level

- ✓ Probable project impacts for avocado and passion fruit (Central) farmers
 - control groups shared some gains; could be partially due to spill-over benefits of projects

- ✓ Farmers taking steps to upgrade their enterprises to increase production, productivity and sales in future

- ✓ Impacts at enterprise and household levels less striking than changes at market level
 - smallholders and their households may realize additional benefits in next few years resulting from project activities examined by study

Summary - Market Level

- ✓ Significant changes in structure of avocado and passion fruit markets
 - new farmer groups
 - new market/procurement firms
 - new relationships between lead firms, farmers, and service providers
 - contract sales
 - introduction of avocado processing firms

- ✓ Sustainability (commercial viability) of these changes is still unknown

- ✓ These changes offer better opportunities for smallholder growth and marketing;
 - but rising standards in importing countries pose challenges that may or may not be met successfully in future

- ✓ Meaningful improvements for farmers in market access, adoption of improved technologies, and delivery of producer services

Implications for Future Programs

- ✓ Flexible approaches to experimentation: provide base for learning
 - projects valuable as experiments, regardless of impacts
- ✓ Broader understanding of end market demand drives competitive advantage and ability to respond to demand changes
 - identify leverage points or incentives for systemic value chain improvements
- ✓ Market-based approaches to greater integration of smallholders



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THANK YOU!

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seminar presentations and papers

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