Highlights from Impact Assessments
ILRI and Livestock and Fish CRP

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Impact Assessment Focal Point Meeting
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ILRI impact assessment studies

✓ Focus on ex post and ex ante impact assessment studies (mostly livestock technologies on animal health, feeds and feeding, genetics)
  

✓ Impacts of policy change – smallholder dairy marketing in Kenya (Kaitibie et al 2008)

✓ Application of experimental/quasi-experimental approaches in design of later IA studies
  
  o HPAI vaccination in Indonesia (2010)
  
  o Utilization of crop-residues in sweet potato-pig systems in Sichuan (2010)
  
  o Training in milk handling of informal milk traders in traditional dairy systems in Assam, NE India (2013)
Key highlights of recently completed studies (2012-2013)

✓ Ex post impact assessment of training in milk handling and certification by informal milk traders in traditional dairy systems in Assam, NE India.

  - prospective matched cohort study using a double difference design (before and after, with and without intervention), using 2009 surveys as baseline (KAP, milk quality assessment)

  - evaluation of economic impact and cost-benefit analysis (positive economic benefits from training, e.g., higher margins relative to non-exposed)

  - qualitative analysis of the process of influencing policy (outcome mapping)
Key highlights of recently completed studies (2012-2013)

✔ Ex post economic assessment of intervening against HPAI in Nigeria

- applied a simple compartmental model to define endemic and burn-out scenarios for the risk of spread of HPAI in Nigeria
- Used estimated risk parameters to stochastically simulate the trajectory of the disease, had no intervention been carried out.
- On average, incremental benefit with intervention scenario amounted to US$ 63.7 million with incremental net benefit of US$27.2 million, and benefit cost ratio of 1.75.
Key highlights of recently completed studies (2012-2013)

✓ Ex post economic impact assessment of adoption of smut-resistant Napier grass in Kenya.
  
  o a reduction of 40 per cent of the yield due to smut would cost a farmer US$108 in lost income from Napier grass sales. These losses can be offset by using *Kakamega I* rather than a susceptible variety.

  o production losses due to smut of about 0.2 tonnes per hectare per year for zero grazing systems translate to an annual loss to a smallholder farmer equivalent to 22 days of feed for a dairy animal or a loss in income on 220-330 liters of milk.
New IA studies, approaches

- SPIA-funded study in Tanzania (Assessment of change in nutrition linked with changes in productivity and dairy income brought about by farmers’ use of the dairy business hubs); experimental, DID + propensity score matching
- Integrating dairy goat and root crop production in Tanzania (impacts on productivity, livelihoods, environment of improved goat breeds with sweet potato and cassava); quasi-experimental, before and after comparison.
- Napier grass - impact assessment of Gene Bank technology
- ECF vaccine being planned (proposal development).
IA strategy

✓ L&F has defined its impact pathways based on Theory of Change framework (http://livestock-fish.wikispaces.com/).

✓ Develop and implement monitoring and evaluation framework adapted to above; well-defined indicators.

✓ Strong M&E ➔ better IA studies

✓ In terms of strategic plans for IA moving forward, L&F funding is being considered for at least one IA per year ($300k + co-funding from bilateral funds to be sought); details still work in progress on plan for implementation.
Key constraints to effective IA of center and CRP portfolio

- IA assessment studies are implemented at various levels, within CRPs and broadly across ILRI; coordinated approach to systematize application of methods and synthesis of learning:
  - Targeting theme in L&F – foresight, ex ante impact assessments; building capacity in application of TOA (Trade off Analysis, initially applied to ruminant model)
  - MEL (Monitoring, Evaluation and Learning) Unit – supports L&F specifically, but also has coordinating function for all IA initiatives within ILRI; limitations to fully support IA needs (capacity and resources).
  - IA initiatives for projects, focused on specific technologies and practices as interventions; diverse range of application of methods and scientific rigor.

- CRP funding for IA only for CRP work, non-fungible to support center IA initiatives that fall outside of CRP mandate, e.g., work prior to CRP era

- CRP work still evolving, may not yet be ripe for IA?
Challenges for IA in moving from center to CRPs

✓ Methods and approaches, better design, improved capacity for IA.

✓ How best to align center IA initiatives with CRP specific requirements; CRPs control the purse strings, hence can dictate the IA agenda.

✓ What are we learning from the IA studies that can inform future program design, in addition to validating the value of CGIAR work?