Developing the India Smallholder Dairy Value Chain Impact Pathway(s)

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Workshop on Smallholder Dairy Value Chain Transformation in
Bihar – Challenges, Opportunities and the Way Forward
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ICARDA
Science for Better Livelihoods in Dry Areas

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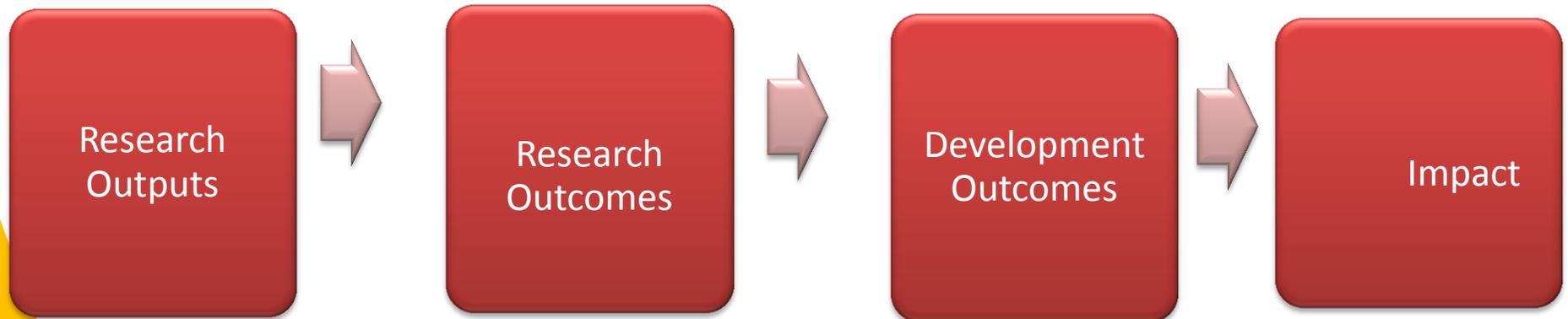Since 1967 / Science to cultivate change

Introduction

- The L&F CRP's objective in India is:

  "To sustainably increase the productivity of small holder daily production to increase the supply and affordability of milk and dairy products for poor producers and for poor consumers."

- However to do this?

  ✓ Develop articulate pathways to impact with partners,
  ✓ Identify how interventions will deliver the benefits,
  ✓ and how actors will have to change to cause the desired outcome, will need to be clearly defined and mapped out.

Rationale

- There is an increasing expectation of the CG to demonstrate that it is making a difference in the welfare of beneficiaries
- An increasing need for development programs to monitor and adjust progress towards achieving impact
- Its important to monitor and learn during program implementation to increase the probability of progress towards impact

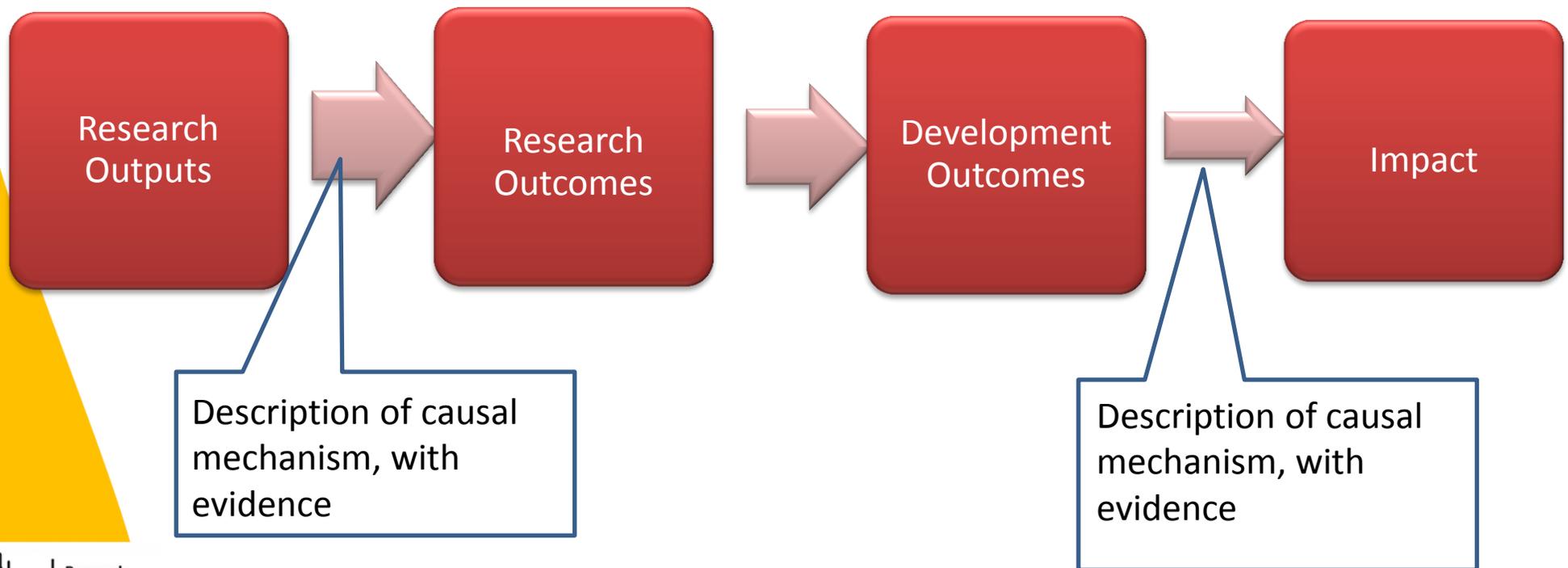CGIAR | Research Program on Livestock and Fish

Impact pathways and Theories of Change (ToC)

- Impact Pathways (IPs) are result chains that represent the steps from outputs to impact at scale, through successive outcomes resulting from adoption and use of program outputs by various stakeholders along the paths.

Research Outputs → Research Outcomes → Development Outcomes → Impact

Theory of change (TOC)

- ToCs extend IPs by describing the causal assumptions and risks behind these links
  - Assumptions are supporting factors and risks are confounding factors
  - If assumptions and risks associated with the arrows are identified and explained, then have a ToC.

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[ Research Outputs ] → [ Research Outcomes ] → [ Development Outcomes ] → [ Impact ]
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Description of causal mechanism, with evidence

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Applications of Impact Pathways and ToCs

- Designing and planning interventions
  - ✓ Design interventions
  - ✓ Understanding and agreeing on interventions
  - ✓ Ex-ante evaluation of interventions
- Managing interventions
  - ✓ Designing monitoring and evaluation systems
  - ✓ Managing adaptively
- Assessing interventions
  - ✓ Designing evaluation questions, methods and tools
  - ✓ Making causal claims
  - ✓ Reporting performance
- Scaling
  - ✓ Generalizing of the theory to other locations

Characteristics of IPs/ToCs

- Are time dependent

    ✓ Reflect understanding up to that point in time

    ✓ Should evolve to reflect current thinking

- Have different purposes

    ✓ Hence likely to be different

- Need to recognize uncertainties

    ✓ They are deterministic

- Can be ex-ante or ex-post

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So what should IPs/ToCs inlcude?

- Research outputs

- Capacity change outcomes

- Behavioral change outcomes

- Enabling environment outcomes

- Direct benefits outcomes

- Program level impact

Research outputs

These include information, understanding and new approaches of putting research into action

- ✓ Capacity development approaches
- ✓ Professional development courses
- ✓ On the job trainings and activities

Capacity change outcomes

- ✓ Change in knowledge, awareness and skills
- ✓ Change in capacity of beneficiaries and intermediaries

Behavioral change outcomes

- Change in actual practices of beneficiaries and "next users"
  - ✓ Land use planners using GIS maps
  - ✓ Smallholders adopt improved crop varieties
  - ✓ NARES approach to soil management adapted to local conditions

Enabling environment outcomes

- New policies and policy instruments
- New or better functioning institutions (formal or informal)
    - ✓ Functional seed distribution system
    - ✓ Increased value chain productivity
    - ✓ Policies e.g better use of natural resources adopted
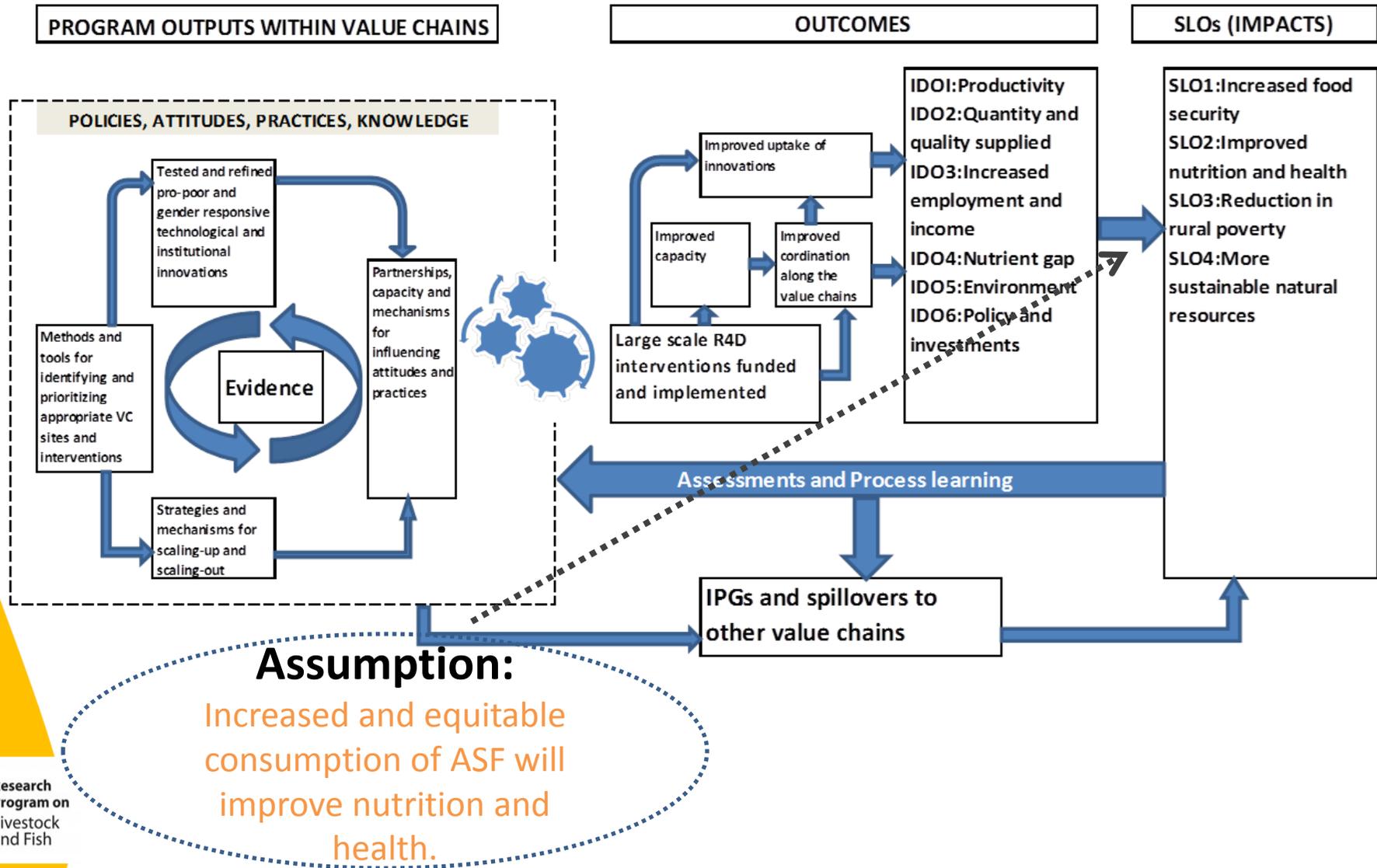
Direct benefits outcomes

- These are largely the CRP IDOs
- Increased productivity for beneficiaries
- Improved distribution of opportunities, income, food security and nutrition benefits to the target group
- Reduced degradation of natural resources
  - Examples:
    - ✓ Increased income for smallholder farmers from adopting improved varieties
    - ✓ Increased consumption of biofortified foods
    - ✓ Reduced loss of biodiversity and genetic resources

Program impacts

- Enhanced livelihoods in target domains across the program
  - ✓ Increased food security
  - ✓ Reduced rural poverty
  - ✓ Reduced under nutrition
  - ✓ Enhanced sustainability of natural resources in target domain across program

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Generic program Impact Pathway(s)/TOC

Figure 3: Livestock and Fish (L&F) Impact Pathways and Theory of Change (ToC)
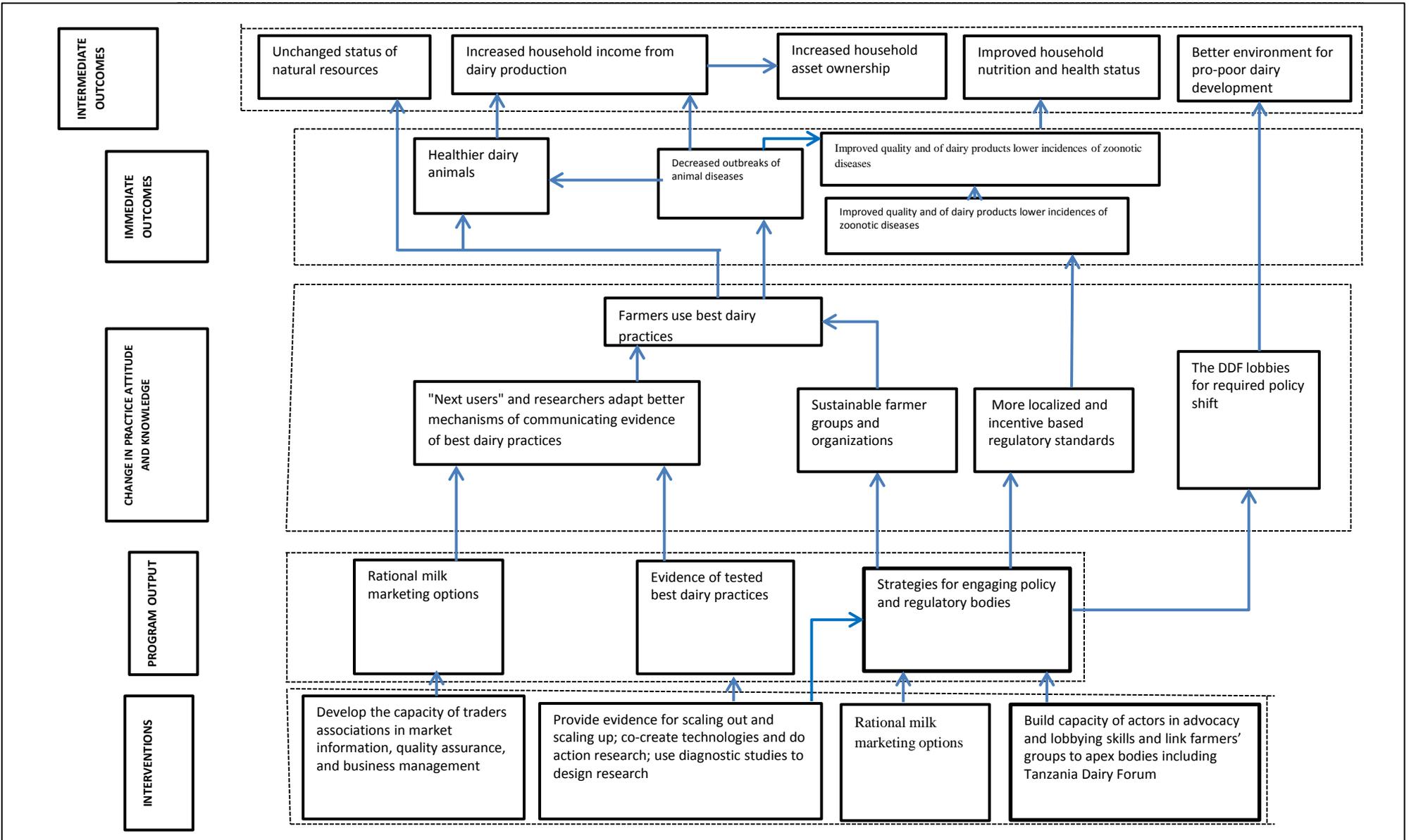
Nested value chain Impact pathway(s)/Tocs

- L&F is a complex program and needs nested IPs
- Nested IPs can be around
  - ✓ By types of strategies being applied
  - ✓ By target groups
- In our case they are the value chains
- So far we have developed IPs for:
  - ✓ Tanzania,
  - ✓ Uganda,
  - ✓ Nicaragua,
  - ✓ Vietnam, Ethiopia and Egypt.
- These allow closer monitoring, evaluation and learning at the value chain level

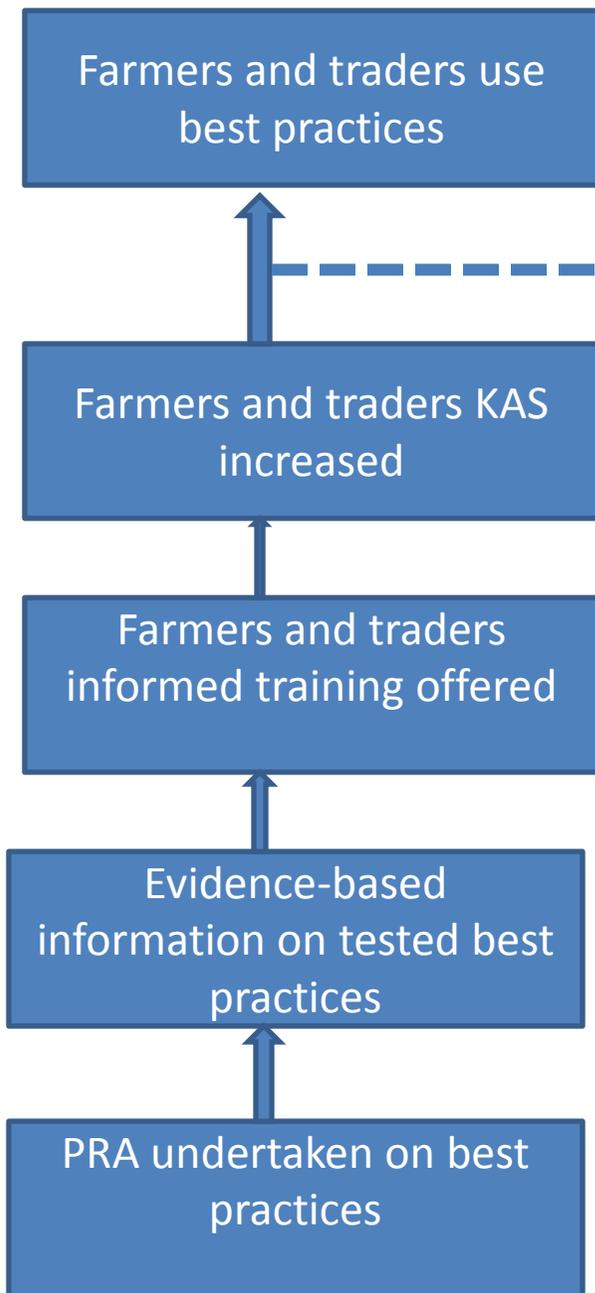**An example of a nested IP from Tanzania dairy value chain:**

"Systems assessment to support value chain transformation "

Impact Pathway 3: Systems assessments to support value chain transformation.

INTERMEDIATE OUTCOMES

- Unchanged status of natural resources
- Increased household income from dairy production
- Increased household asset ownership
- Improved household nutrition and health status
- Better environment for pro-poor dairy development

IMMEDIATE OUTCOMES

- Healthier dairy animals
- Decreased outbreaks of animal diseases
- Improved quality and of dairy products lower incidences of zoonotic diseases
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CHANGE IN PRACTICE ATTITUDE AND KNOWLEDGE

- Farmers use best dairy practices
- "Next users" and researchers adapt better mechanisms of communicating evidence of best dairy practices
- Sustainable farmer groups and organizations
- More localized and incentive based regulatory standards
- The DDF lobbies for required policy shift

PROGRAM OUTPUT

- Rational milk marketing options
- Evidence of tested best dairy practices
- Strategies for engaging policy and regulatory bodies

INTERVENTIONS

- Develop the capacity of traders associations in market information, quality assurance, and business management
- Provide evidence for scaling out and scaling up; co-create technologies and do action research; use diagnostic studies to design research
- Rational milk marketing options
- Build capacity of actors in advocacy and lobbying skills and link farmers' groups to apex bodies including Tanzania Dairy Forum

An example of a sub-ToC from *"Innovative strategies to increase consumption of dairy products"* impact pathway:

"Dairy practices for farmers and traders Toc"

Program M&E/IA next steps

- Develop and publish the Bihar Dairy Value chain ToC/IP narratives

- Develop the Bihar Dairy value chain L&F specific MEL frameworks based on the value chains Impact Pathway(s) and ToCs

- Support ongoing value chain evaluations to continue testing L&F Theory of change

Objectives of the workshop

✓ Communicate and validate the program's intervention logic,

✓ Question and clarify the program's potential for achieving impact,

✓ Begin to lay the building blocks for designing a MEL framework,

✓ Refine the theories of change and the underlying assumptions of causality for the four main intervention areas of the Bihar Dairy Value chain,

✓ Sketch the impact pathways of the four components.

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