



Fund

## **Fund Council**

**4<sup>th</sup> Meeting (FC4)—Montpellier, France**

**April 5-6, 2011**

**"More milk, meat, and fish by and for the poor"**

(Presentation by Carlos Sere)

*Document presented for Agenda Item 12:  
CRP 3.7 - More Meat, Milk and Fish by and for the Poor*

*Submitted by:*  
ILRI



# More milk, meat, and fish by and for the poor

## CGIAR Research Program 3.7

Presented to the CGIAR Fund Council  
by ILRI on behalf of CIAT, ICARDA and the WorldFish Center

Montpellier, France

6 April 2011



# ***Livestock + Fish = big opportunities for the poor***

## **High demand**

*The increasing demand for animal-source foods in developing countries is a big opportunity for smallholders, who can raise their incomes by meeting that rising demand.*

## **Highly nutritious**

*Animal-source foods are critical for malnourished people, especially women and children.*

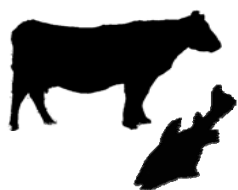
## **Highest value**

*Meat, milk and fish are generally the **highest value agricultural products** globally.*

Projected increase in demand for animal foods to 2020 (% per year)

	Developed countries	Developing countries
Milk	0.2	1.8
Meat	0.5	1.7
Fish	0.0	0.6
Cereals	0.3	0.4

- Nearly **1 billion (70%)** of the world's 1.4 billion extremely poor people depend on livestock.
- **Two-thirds** of the world's livestock keepers are rural women.
- Over **100 million** landless people keep livestock.
- **400 million** people in Africa and South Asia depend on fish for most of their animal protein.



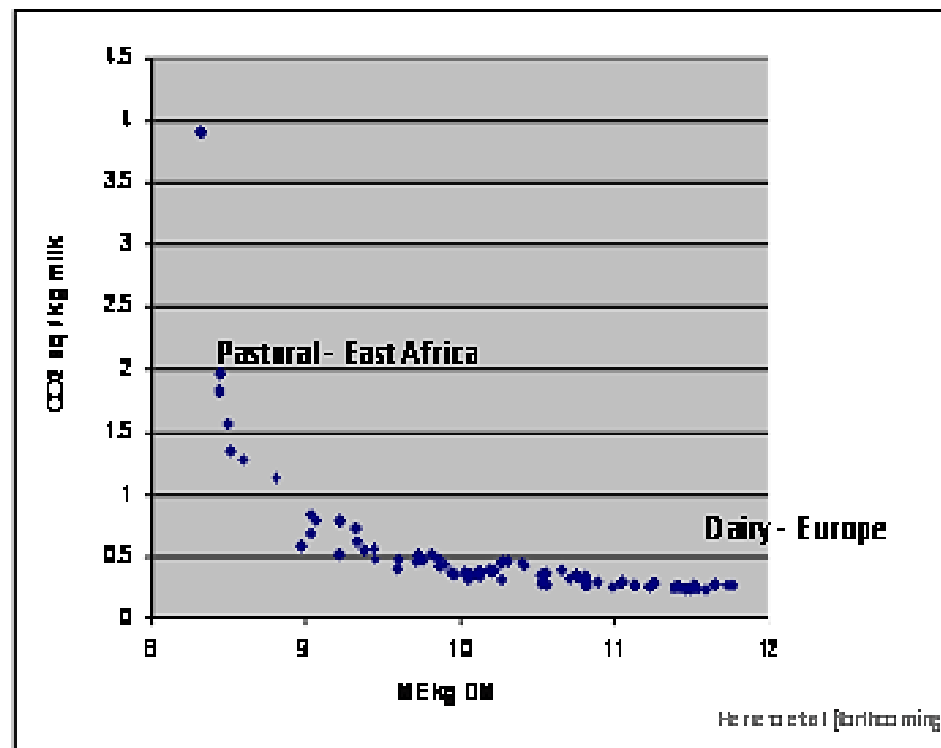
# *Big productivity gaps can be exploited*

## Meeting a triple bottom line

Reducing livestock productivity/efficiency gaps within the developing world will improve **supplies** and **returns** while **reducing** the amounts of greenhouse gases (GHG) produced per unit of livestock output.

Current livestock productivity gaps are huge: Up to 130% in beef, 430% in milk and potential gains in aquaculture over 300%.

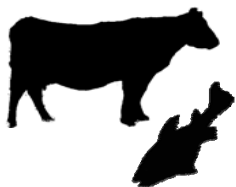
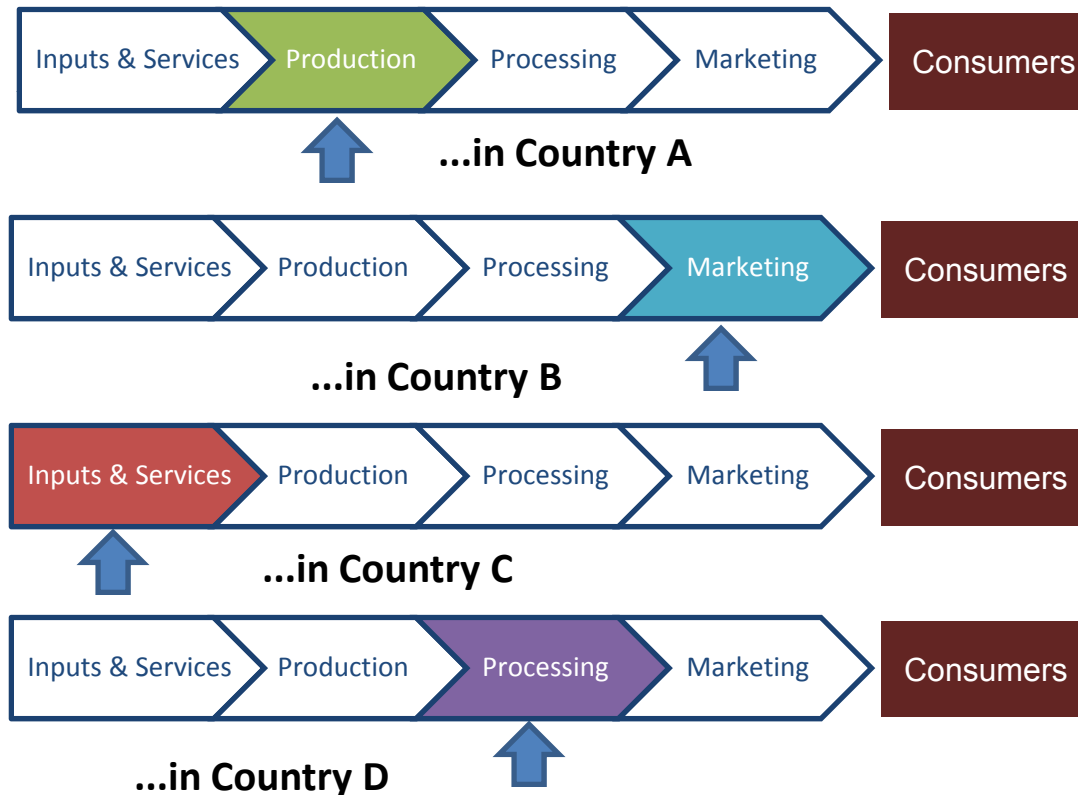
## Implications for livestock efficiency for GHG production



## *Approach: Solution-driven R4D to achieve impact*

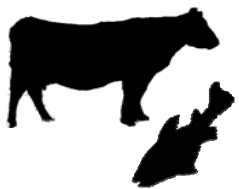
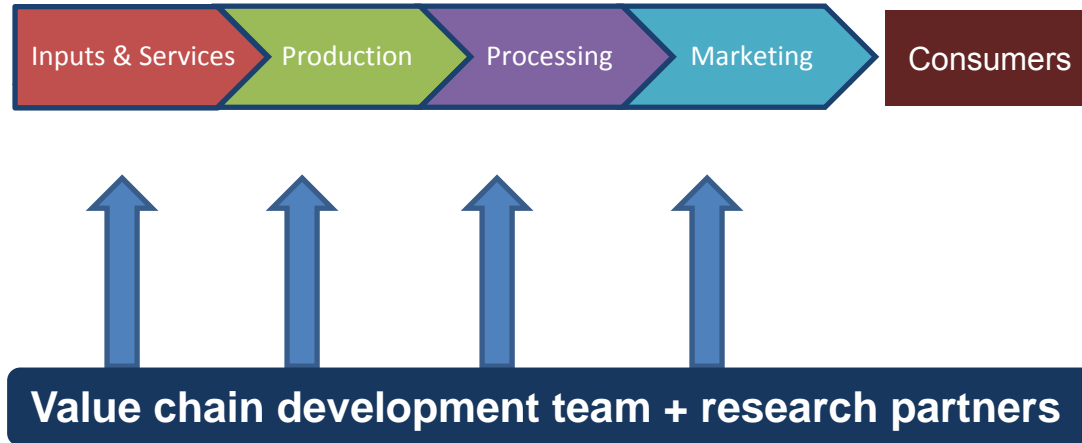
Traditional approach was piecemeal.

Past research has focused specific aspects of given value chains, commodities and country.



We propose a focus on integrated value-chains for bigger impact . . .

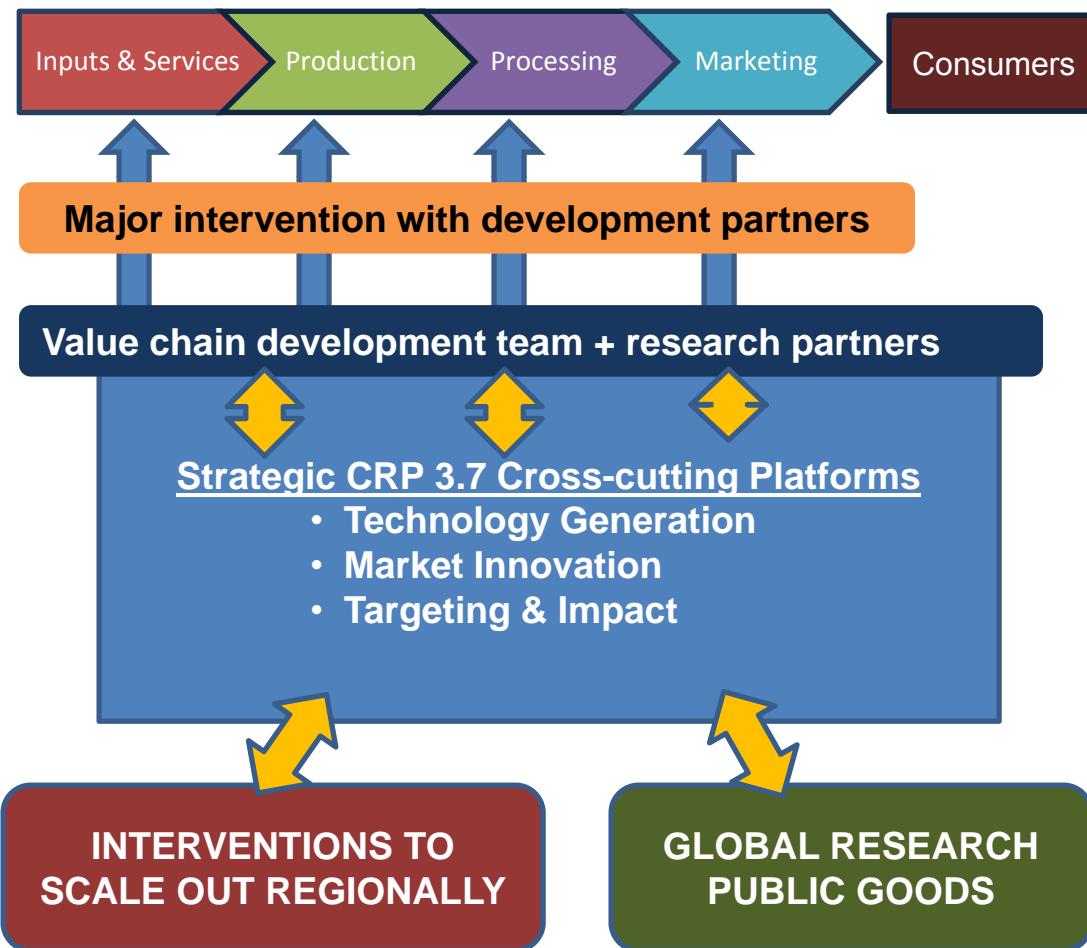
**R4D integrated to transform selected value chains  
in targeted commodities and countries.**



## Approach: Solution-driven R4D to achieve impact

... combined with *strategic cross-cutting platforms* for scaling out.

R4D integrated to transform selected value chains  
In targeted commodities and countries.

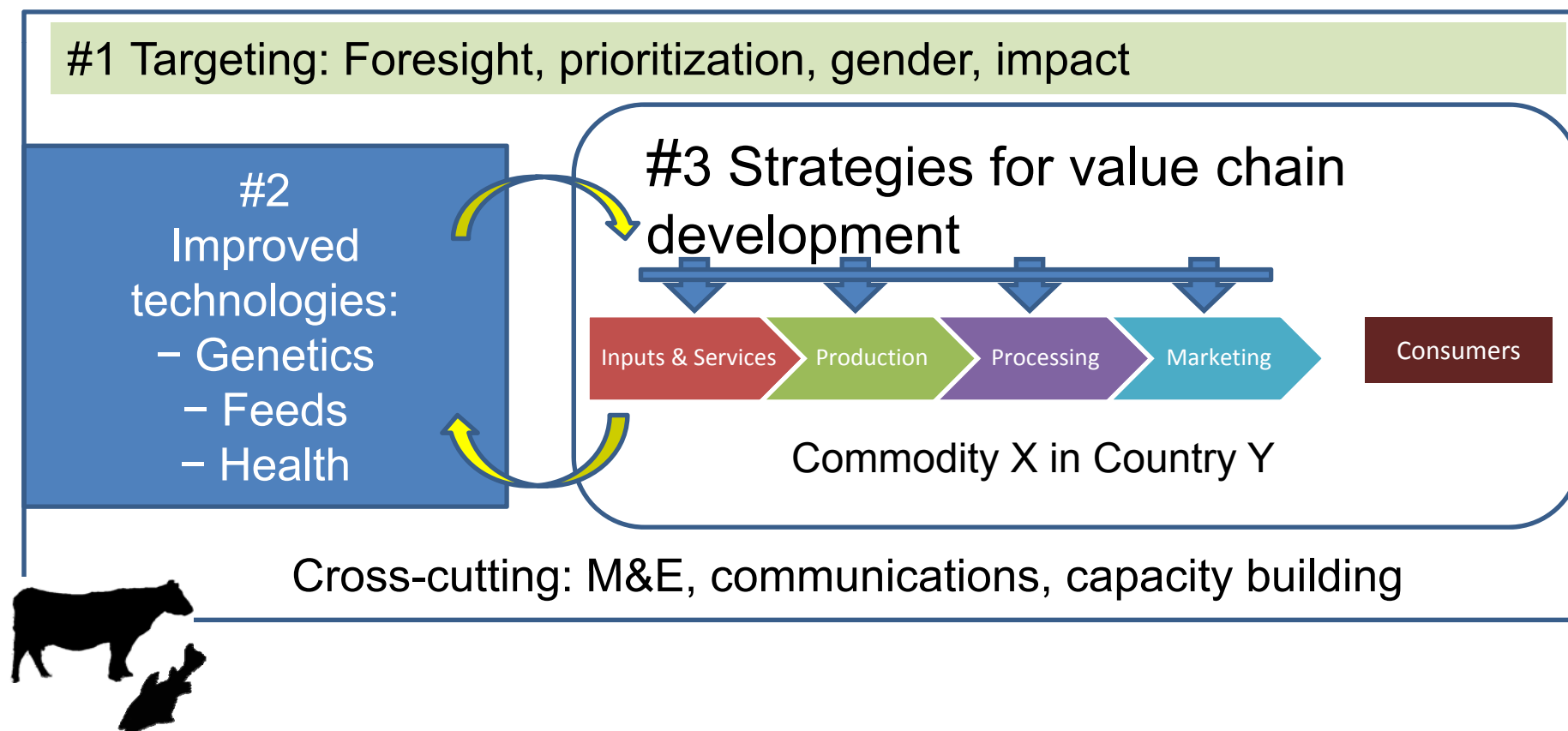


# **Livestock + Fish CRP**

## **Goal + structure**

**Goal:** *To sustainably increase the productivity* of small-scale livestock and fish systems to increase the availability and affordability of animal-source-foods for poor consumers and, in doing so, reduce poverty through greater participation by the poor along the whole value chains for animal-source foods.

**Structure:** Three integrated themes





## ***Selecting value chains able to generate impact and lessons***

Identify high-impact potential regional value chains

- ✓ Strong growth and market opportunities
- ✓ Clear pro-poor potential (production and consumption)
- ✓ Researchable supply constraints
- ✓ Regional/global relevance

Choose target countries

- ✓ Enabling environment
- ✓ Existing momentum

**Dairy:** Smallholder production in Tanzania, India, and Nicaragua/Honduras

**Aquaculture:** Small and medium scale tilapia and catfish systems in Uganda and Egypt

**Pigs:** Smallholder systems in Vietnam and Uganda

**Small Ruminants:** Smallholder goat/sheep systems in Mali and Ethiopia



# Three

## *Livestock + Fish CRP platforms*

### Improved Technologies

- Animal genetics
- Animal feeds
- Animal health

### Value Chain Development

- Sectorial and policy analysis
- Value chain assessment
- Value chain innovation

### Targeting, Gender, Impact

- Systems analysis and targeting
- Gender and equity
- M&E and impact assessment



## ***Livestock + Fish CRP partnerships for impacts***

- **Development investors**  
*Provide* money, influence, advocacy.  
*Get* better bang for their bucks,  
better-targeted impacts.
- **Livestock/fish research communities**  
*Provide* and *Get* co-development of new science and capacity.
- **Multinational agencies**  
*Provide* policies, advocacy,  
means to scale up interventions.  
*Get* evidence-based knowledge.
- **Development partners**  
*Provide* relevance, reality checks, expertise.  
*Get* practical science for development.
- **Partnership process during CRP development:** multiple stakeholder meetings, e-consultation resulting in 410 comments and over 14,000 views of CRP 3.7 website <http://livestockfish.wordpress.com>.



# ***Monitoring + evaluation to ensure impact***

Multiple levels of performance  
and process monitoring along the whole  
**Output→Outcome→Impact** pathway.

## **Technology advances**

- Metric: Demonstrated potential for productivity gains and risk reduction.

## **Behavioural changes**

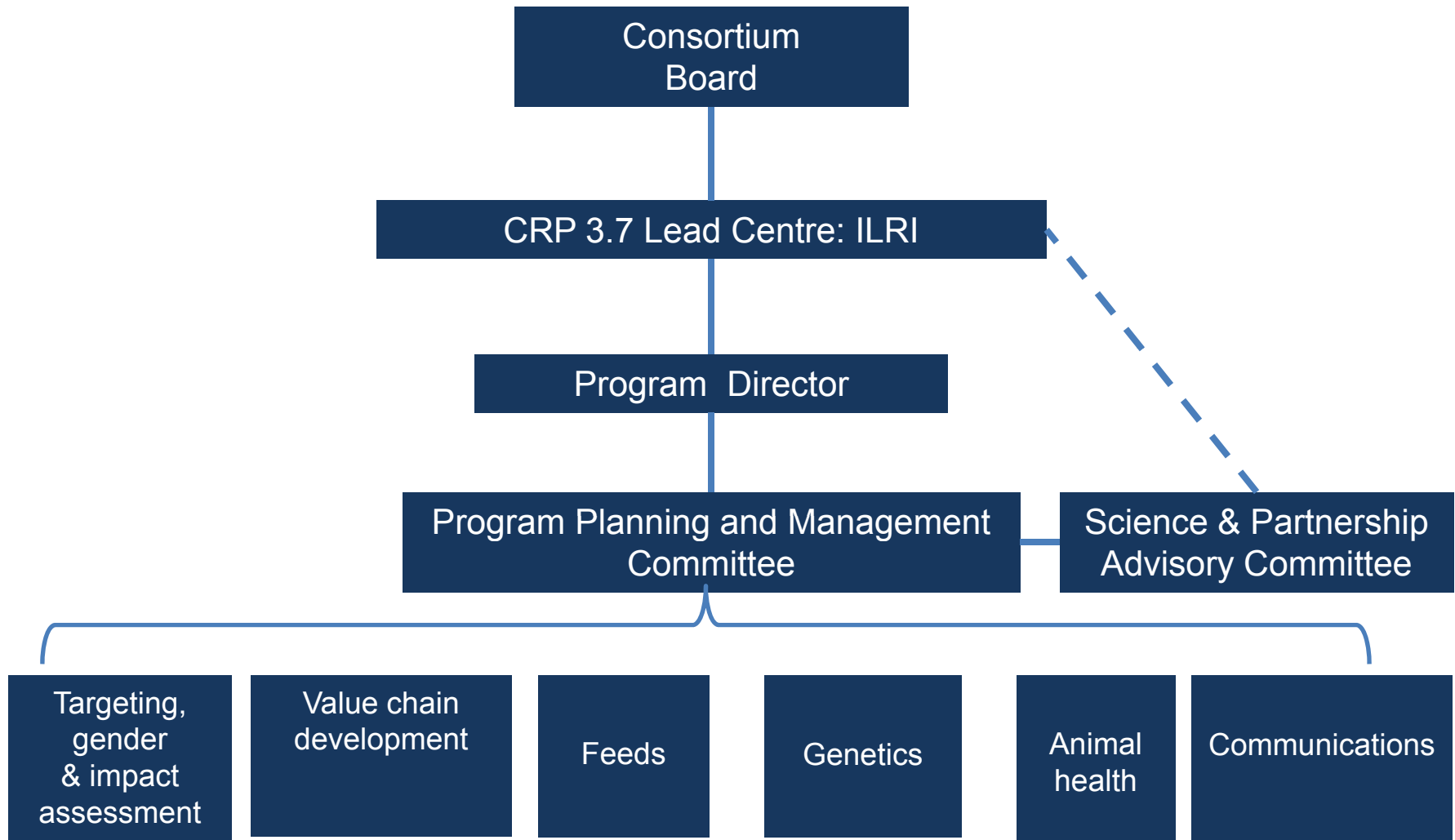
- Metric: Sustained, gender-disaggregated uptake among target users of improved technologies, strategies and policies.

## **Welfare changes**

- Metric: Gender-differentiated changes among target beneficiaries in income, assets, vulnerability, and health.



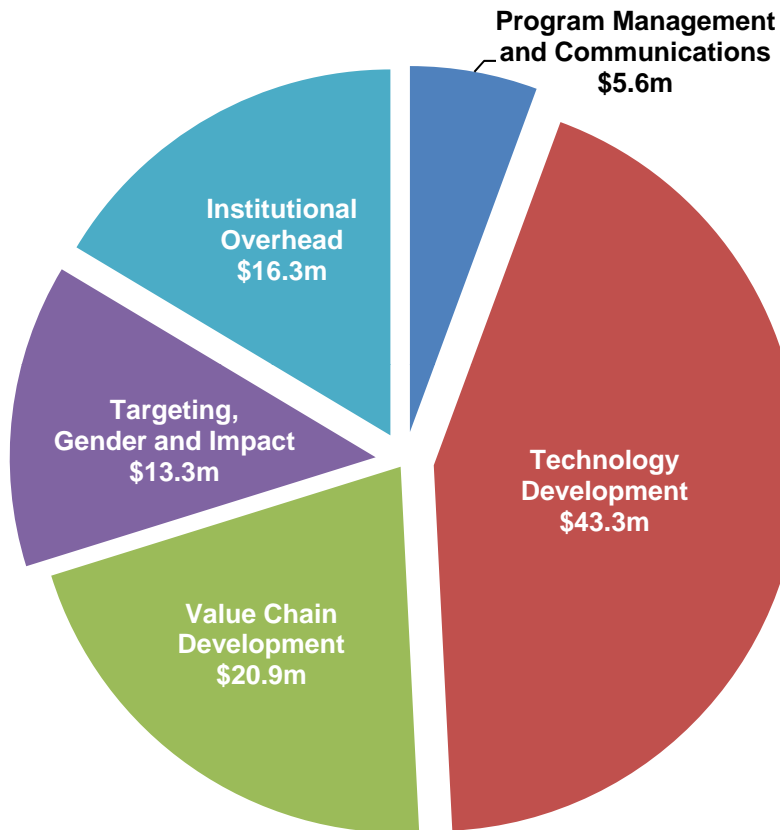
## *Livestock + Fish CRP governance*



Clear accountability, strategic external input, representing multiple sciences and institutions.

# Budget

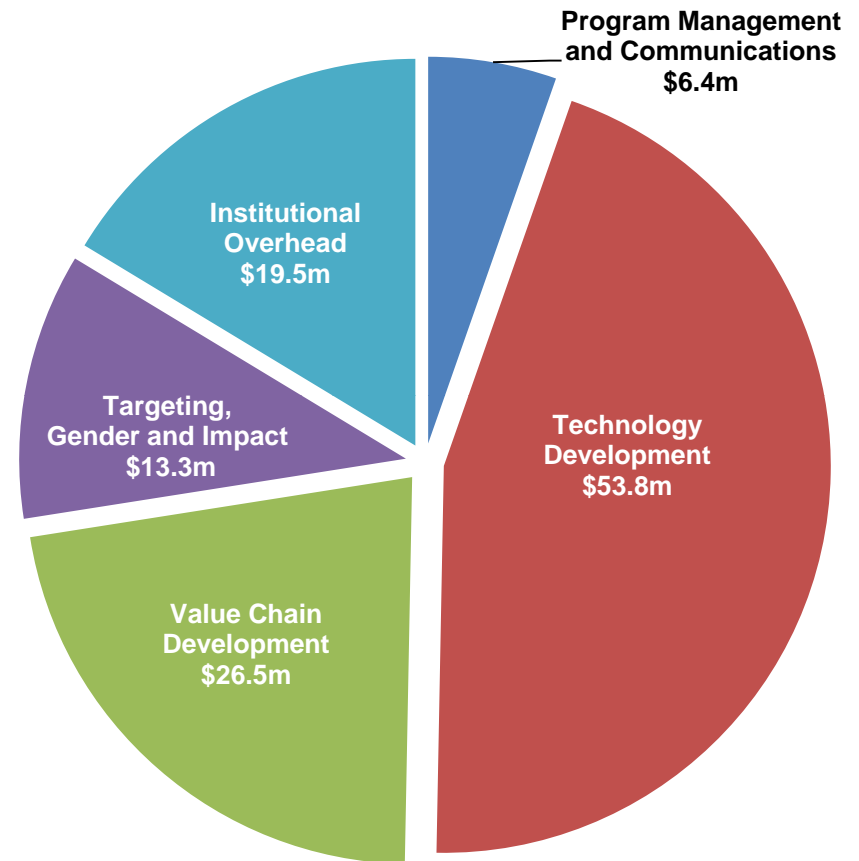
## Initial budget



**TOTAL = US\$99,583,000**



## Budget for greater global outcomes



**TOTAL = US\$119,707,000**

### Areas of increased investment

- Biotechnology for food-feed crops and forages
- Novel vaccines
- Genetic data management, bio-banking
- Leveraging agri-business

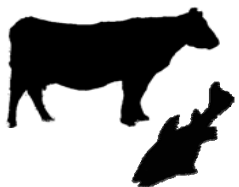
## ***Managing risks of Livestock + Fish CRP***

- Focus on a few value chains could limit ability to make wider impacts.

*Mitigate by building strategic platforms for creating global public goods and for scaling up best practices.*

- Continued low levels of understanding of the need for livestock research and negative perceptions of livestock in developed countries could reduce livestock funding.

*Mitigate by providing a stream of evidence about pro-poor opportunities through livestock and proactively engaging in global debate.*



## ***Expected impacts over the next 10 years***

### **SPECIFIC VALUE CHAIN IMPACTS**

+

### **GLOBAL PUBLIC GOODS**

#### **Smallholder dairy and pig value chains**

*Opportunities for many poor people to increase their yields dramatically*

**High potential** – Double productivity and livestock incomes in 100,000 households in each country (50k in C America)

#### **Small-scale aquaculture**

*Opportunities for many poor people to get nourishing food*

**High potential** – Increase supply of fish by 615,000 tonnes/year in Egypt, and by 11,000 tonnes/year in Uganda (doubling supplies there)

#### **Smallholder small ruminant value chains**

*Challenged by risk and public neglect, but opportunities to benefit rural poor people, including women.*

**Medium potential** – Increase national feed production by 5,000 tonnes/year of meat, doubling livestock incomes in 70,000 households in each country

#### **GPGs will multiply benefits beyond initial VCs**

- Impact through 2<sup>nd</sup> generation VCs, building on lessons for more rapid and cost-effective outcomes
- Increased capacity of a wide range of partners
- Uptake of pro-poor livestock development strategies and policies
- New science of demonstrated wide relevance





# More milk, meat, and fish by and for the poor

Thank you.

