

# Livestock a pathway out of poverty ILRI's strategy to 2010



ILRI

International Livestock Research Institute

**Carlos Seré**

# Poor People and the Role of Livestock



**ILRI**  
International Livestock Research Institute

# Poverty

- 1.2 billion people live in absolute poverty (on less than US\$1 per day)
- 75% of the poor live in rural areas
- South Asia – 70% of rural household income derived from farming or farm labour
- Sub-Saharan Africa – 65% of rural household income derived from farming or farm labour

# Contrasts in Perception of Livestock

	<b>Developed</b>	<b>Developing</b>
<b>Animal Source Foods</b>	High cholesterol Consumption steady	Essential amino acids → good health, physical and cognitive development
<b>Manure</b>	Ground water pollution Unpleasant aroma	Fertiliser Affordable domestic heating fuel
<b>Demand for Livestock Products</b>	Demand steady or has reached plateau	Demand increasing – Livestock Revolution Opportunities for income generation, - milk, meat, eggs, hides, fibres – especially for women Sustainable development

# The Role of Livestock

- Livestock contribute 25 – 30% of agricultural GDP in developing countries
- Expected to rise to close to 50% over next 20 years
- Indirectly and directly, domestic animals supply 30 – 40 % of total value of food and agriculture production

Livestock provide livelihoods where crops will not grow



# Livestock as Assets



Insurance against:

- ◆ Periodic hunger (non-cropping dry seasons)
- ◆ External shocks (drought, war, disease epidemics)
- ◆ Cash emergencies (hospital bills, school fees)



Source of potential income generation (eggs, meat and milk)



**The corn is  
Florence's  
daily food and  
feed supply**

**The cow is  
Florence's  
income and  
insurance**



# School fees



# The Livestock Revolution



# The Livestock Revolution

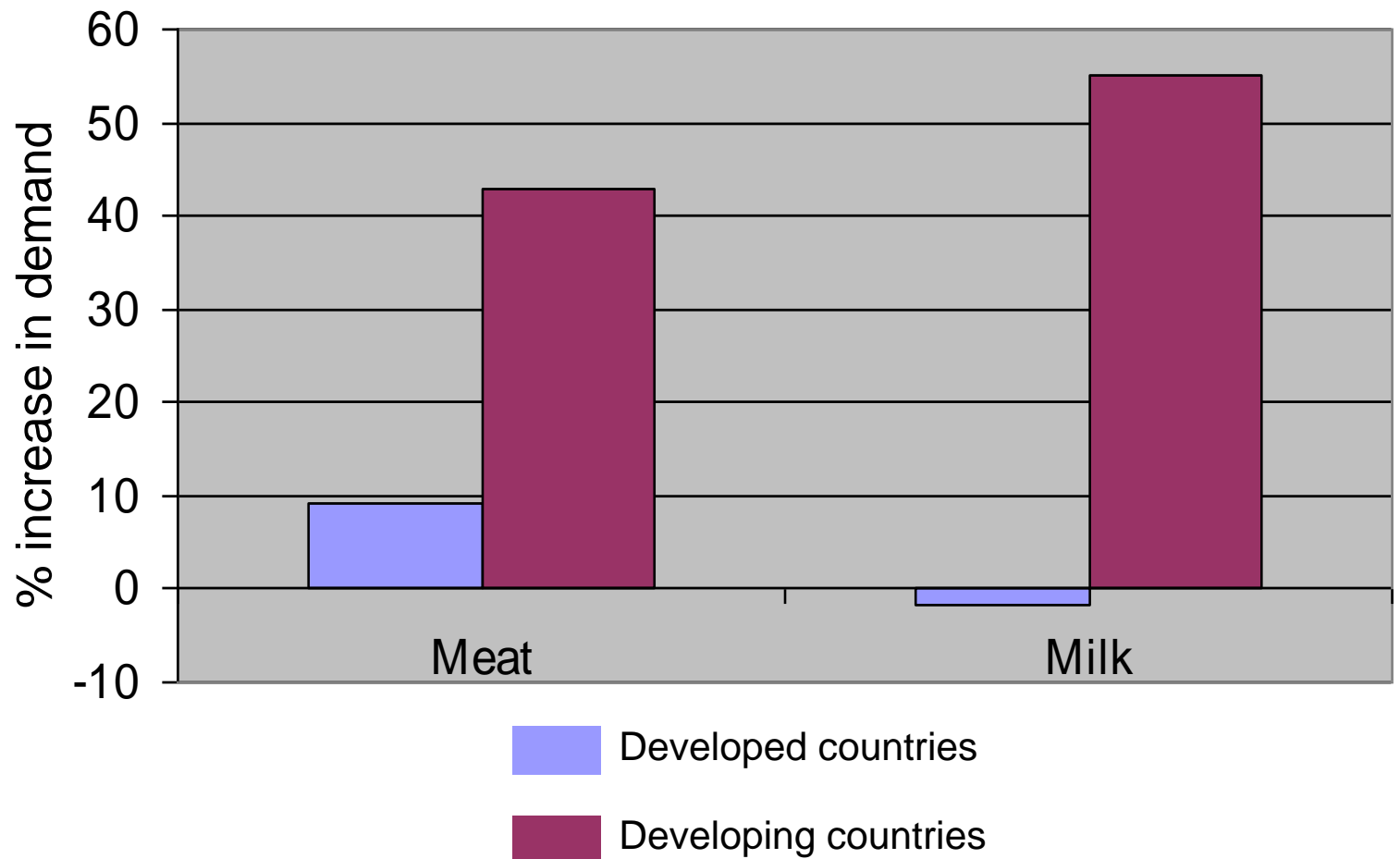
- In the next 20 years, the demand for livestock products will double
- Significant increases in beef, pork and poultry meat and especially milk
- Feed grain use will double in developing regions primarily for industrial swine and poultry systems

# The Livestock Revolution

- Opportunities for asset building and poverty reduction
- Significant threats of environmental degradation and inequitable distribution of benefits



# Percentage Increase in Total Demand for Livestock Products 1993 – 2020



# ILRI's Role in Livestock Research and Poverty Reduction



# ILRI's Goal

ILRI positions its research at the dynamic interface of poverty alleviation and livestock to sustainably enhance the livelihoods of the poor

# Pathways out of Poverty





# Securing the current and future assets of the poor



# *Examples*

- Vaccines, pen-side diagnostics
- Mapping of livestock bio-diversity
- Community-based control of animal and human sleeping sickness





Sustainably  
improving the  
productivity of  
agricultural  
systems of the  
poor

# *Examples*

- Development of improved food and feed crops (cowpeas, millets, sorghum)
- Nutrient cycling in crop/livestock systems (manure)
- Livestock Farmer Feed schools – building adaptive capacity

# Encouraging the participation of the poor in livestock-related markets



# *Examples*

- Analysis of international policies and their implications for participation of the poor in markets
- Identification of sanitary trade barriers
- Innovation to improve competitiveness of poor in markets

# ILRI's Research Themes



# Targeting Opportunities: How can livestock contribute to pathways out of poverty?





# Targeting Opportunities

## POTENTIAL RESEARCH OUTCOMES

- Mapping of poverty and livestock
- Models of household economies of poor livestock keepers
- Impact assessments of key steps such as vaccines, improved food and feed crops
- Ex-ante assessments



# Enabling Innovation:

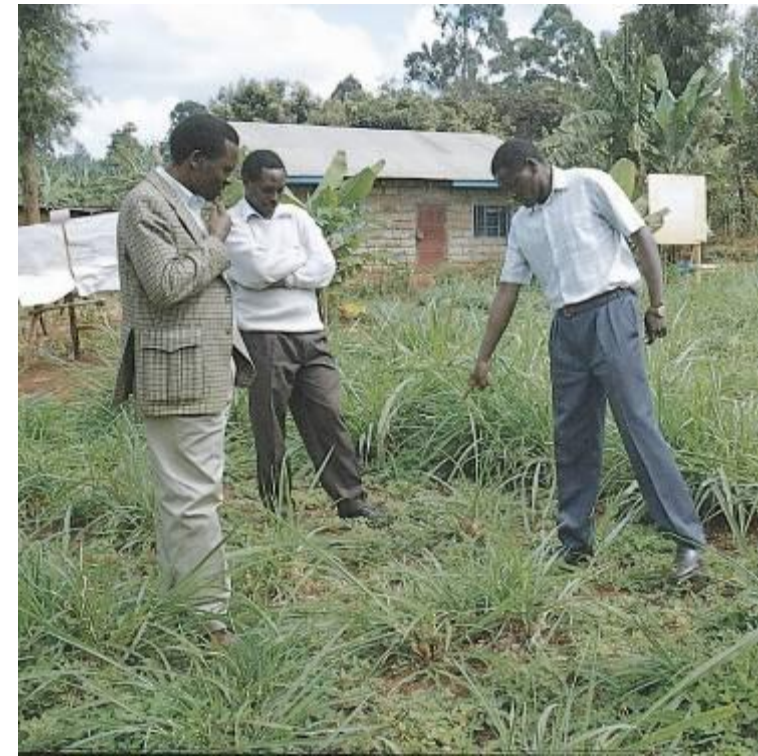
How can adoption of livestock and agriculturally related innovations be accelerated?



# Enabling Innovation

## POTENTIAL RESEARCH OUTCOMES

- Adaptation of **farmer field-school** concept to improve **livestock systems of the poor**
- **Participatory** development of **best-bet forage**, food and feed crops
- Widespread dissemination of **tools and methods** involving partners – **NARS, ARIs, extension services**



# Market Opportunities

How can the poor access the benefits of emerging livestock markets?



# Market Opportunities

## POTENTIAL RESEARCH OUTCOMES

- Identification of **policy issues** surrounding trade
- Impact of **food safety regulations** on access of the poor to **markets**
- Analysis of **markets** for **food feed crops** etc.



# Biotechnology

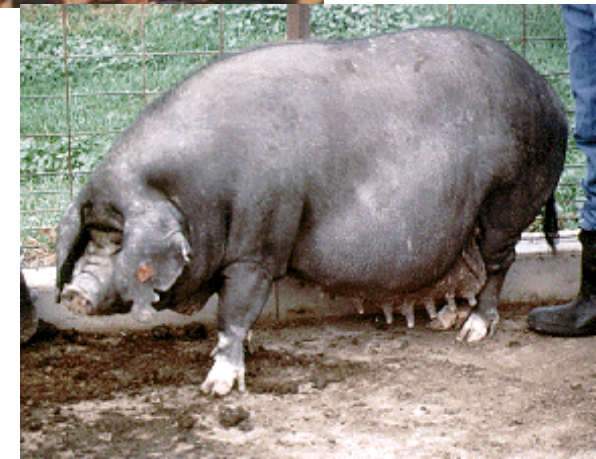
How can livestock biotechnology best be used for development?



# Biotechnology

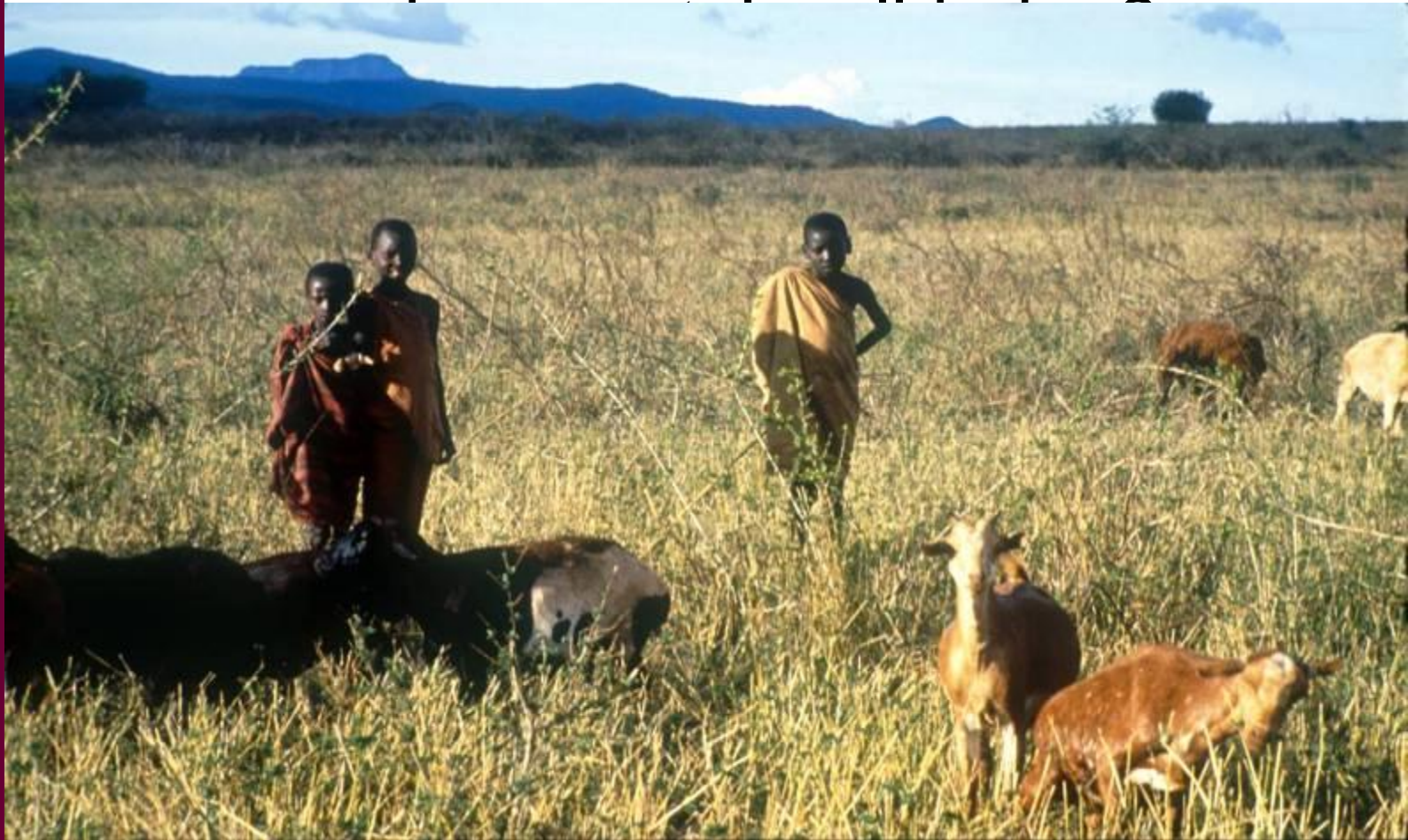
## POTENTIAL RESEARCH OUTCOMES

- **Vaccines** for priority diseases of the livestock of the poor
- Genetic markers to **identify** and **conserve** indigenous livestock resources
- Development of improved **food** and **feed crops**



# People, livestock and the environment

How can livestock livelihoods make a larger contribution to human and





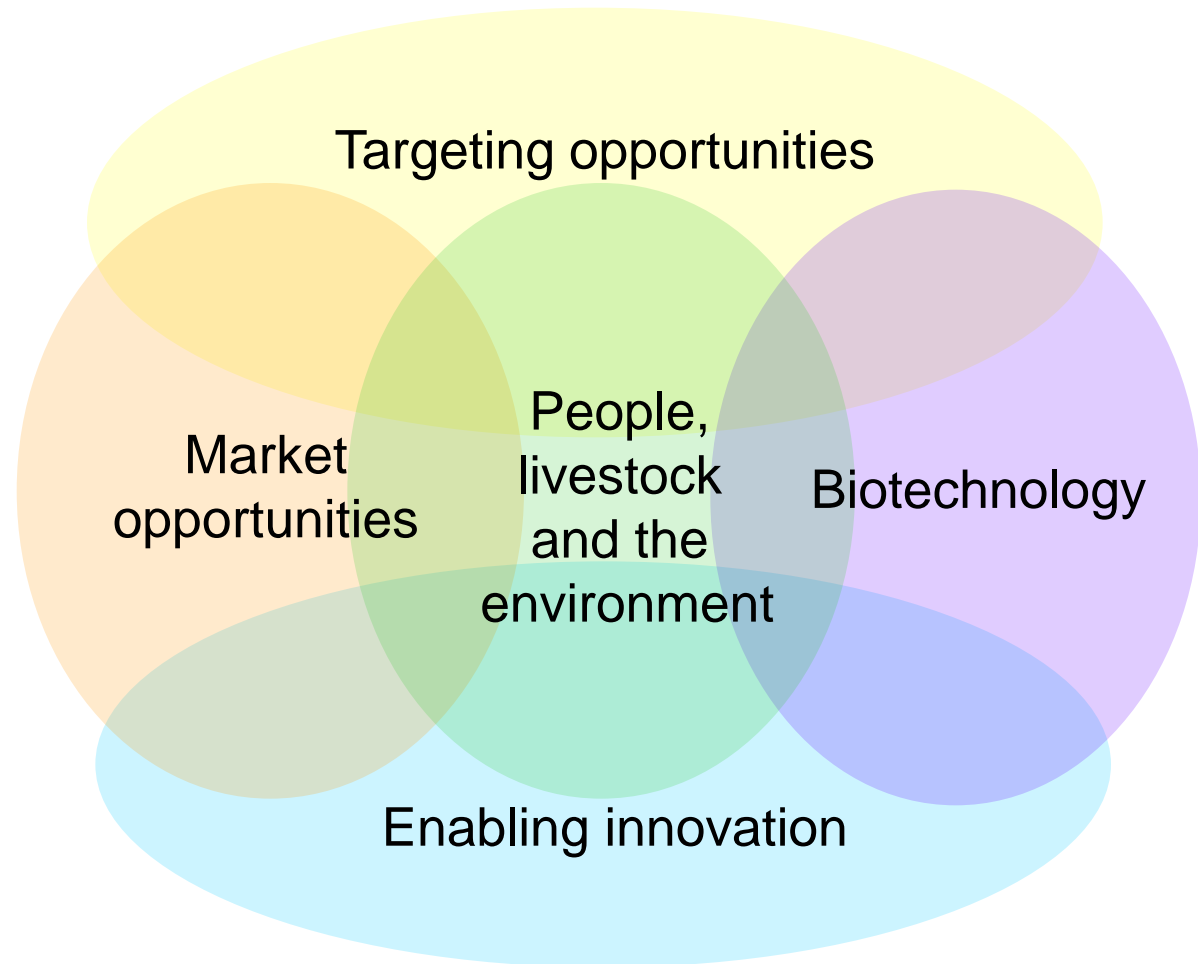
# People, Livestock and the Environment

## POTENTIAL RESEARCH OUTCOMES

- Identification of entry points for **poverty reduction** in **crop-livestock systems**
- Management of **livestock contributions** to sustainable **eco-agricultural systems**



# ILRI's Research Themes



# Partnerships: The Way Forward



# Through partnerships research can achieve greater impact

Partnerships amongst:

- National Agricultural Research Centres (NARS)
- Private companies
- International Agricultural Research Centres (IARCS)
- Extension and Development Agencies

Research  
at the  
**crossroads**  
of livestock  
and poverty  
alleviation

