



Listening to Farmers: Practices of Demand-driven Agricultural Extension (DDAE) in Nepal

Padma Bahadur Singh, Ph.D.

IAAS Talk Series

Tribhuvan University, Kirtipur

April 9, 2025

Objectives of Presentation

- To emphasize the importance of demand-driven agricultural extension approach in socio-economic transformation of small and medium farmers;
- To underscore the need for integrating the approach in the mainstream agricultural extension system

Structure of Presentation

- Touch on Conceptual Understanding of DDAE
- And explore:
 - ✓ *How a demand-driven extension model works in practice*
 - ✓ *What are the challenges in the implementation and*
 - ✓ *What steps can be taken to strengthen this approach in Nepal's agricultural landscape*

Introduction to Demand-driven Agri Ext (DDAE)

- NeuChatel Group defines DDAE

“Agricultural Extension that prioritizes the needs and priorities of farmers and other stakeholders including consumers in agricultural value chain, rather than being driven by the interests or priorities of external organizations or governments”

- Two approaches- Supply-driven and Demand-driven approach stand out as per this definition.

Comparison between Supply-driven vs Demand-driven approaches

Aspect	Supply-Driven Extension	Demand-Driven Extension
Focus	Top-down, expert-driven	Bottom-up, farmer-centered
Decision-Making	Determined by government agencies or experts	Driven by farmers' needs and priorities
Farmer Involvement	Passive recipients	Active participants in planning and decision-making
Approach to learning	Pedagogical	Andragogical
Role of Extension agent	Instructor, messenger	Facilitator, enabler
Customization	Standardized, one-size-fits-all solutions	Tailored to the specific needs and contexts of farmers
Empowerment	Limited farmer empowerment	Empowers farmers through social capital, participation and decision-making
Program orientation	Production orientated	Market orientated
Capacity building	More on technical aspect	Technical as well as social aspect
Sustainability	Can lead to dependency on external support	Promotes sustainability through ownership and empowerment
Feedback Mechanism	Limited feedback from farmers	Strong feedback loops, continuous improvement

Evolution of DDAE

- Modern Agricultural extension is rooted in the needs of farmers and farmer associations during the Irish potato crisis during the mid-19th century
- Gradually, the bureaucratization of extension took place dominated by a top-down approach
- After the Green Revolution, there was a realization of negative impacts of supply-driven approach::
 - *adverse environmental impact*
 - *small and medium farmers marginalized*
- Realization to shift the focus from supply driven approach to the one that listens to, learns from, and co-creates solutions with farmers.. After 70s/80s several tools and methods evolved notably by ;
- Paulo Freire, Malcom Knowles, Robert Chambers, David Korten, Norman Uphoff among few, championing for farmer engagement and empowerment

Practices of DDAE

1. Farmer's Field School-

- A **group-based learning process** for farmers
- Focuses on **learning by doing** in real field conditions
- Aimed at improving **farmers' decision-making skills** through observation and experimentation
- Promotes **sustainable agriculture** and **farmer empowerment**

How is it Conducted?

- A group of 20–25 farmers meet regularly during the **crop or livestock season**
- Held **in the field**, not in a classroom
- Facilitated by a trained **extension worker or experienced farmer**
- Includes:
 - ✓ *Field observations*
 - ✓ *Hands-on experiments*
 - ✓ *Group discussions*
 - ✓ *Special topic sessions (e.g. pest control, soil health)*
- Emphasizes **experiential learning** and **peer-to-peer knowledge sharing**

Farmer's Field and Business School at BauhaGumha, Tansen (supported by Heifer International)



Practices of DDAE (contd.)

2. Community Seed Bank -

- A **locally-managed seed storage and exchange system**
- Conserves and promotes **local crop diversity**
- Ensures **seed security** for smallholder farmers
- Encourages use of **traditional and climate-resilient seed varieties**
- Supports **community seed sovereignty and resilience**

How is it Organized?

- **Initiated and run by local farmers**, often with support from NGOs or government
- Seed is collected, cleaned, stored, and distributed or exchanged among members
- Identification, collection, and preservation of Raithane Bali
- **Documentation** of seed types, sources, and performance is maintained
- Includes:
 - ✓ *Training*
 - ✓ *Farmer visit programs*

CSB Agyuli, Kawasoti, Nawalparasi (*fostered by LiBird*)

- Total members: 953
 - *Female: 680*
 - *Male: 273*
- Executive committee: 11
- Main Functions:
 - *Seed Conservation: 63 varieties of 24 crops*
 - *Seed multiplication, packaging, and distribution: approx. 50 mt annually*

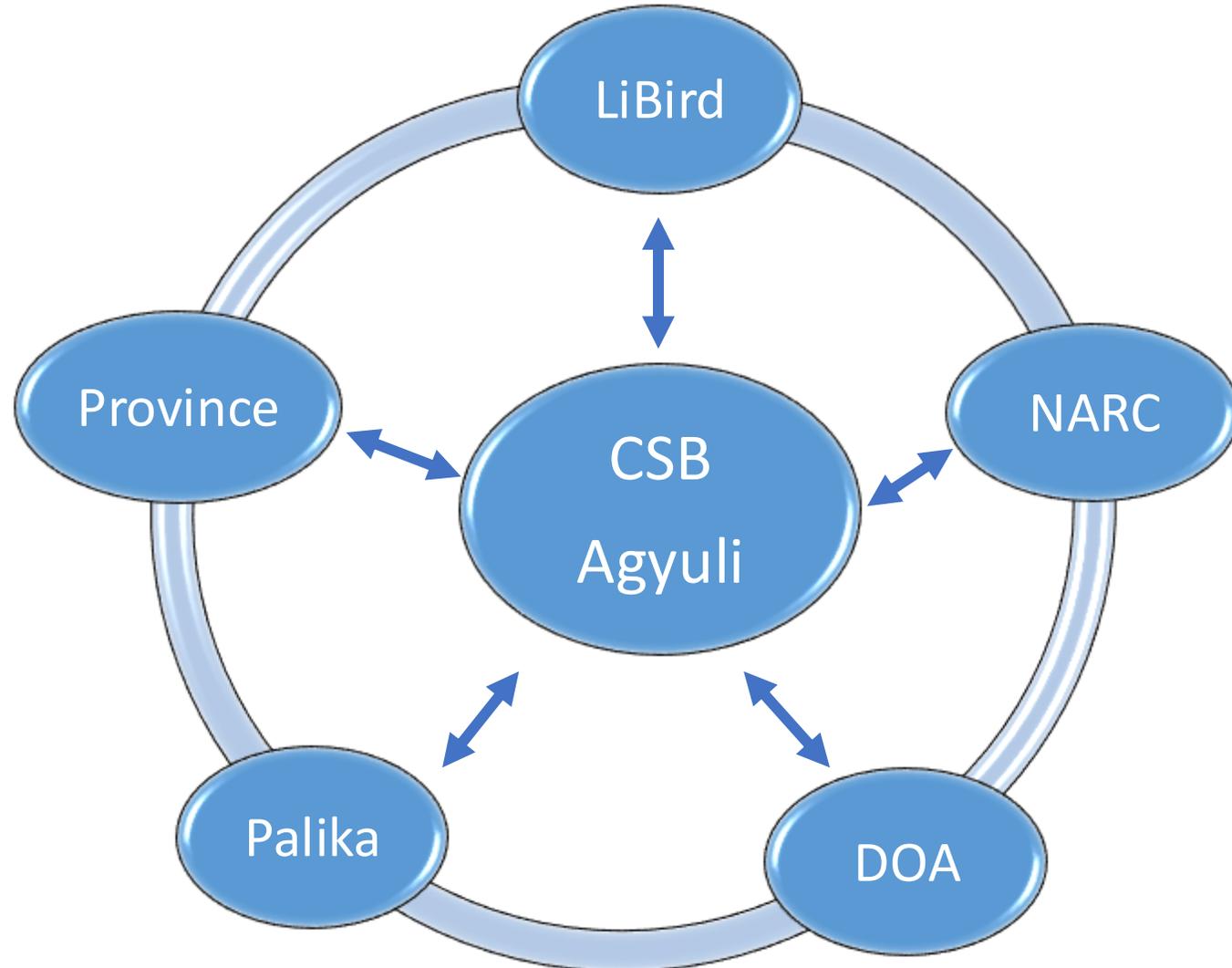
Seed Conservation



Seed Conservation (contd.)



CSB Linkages



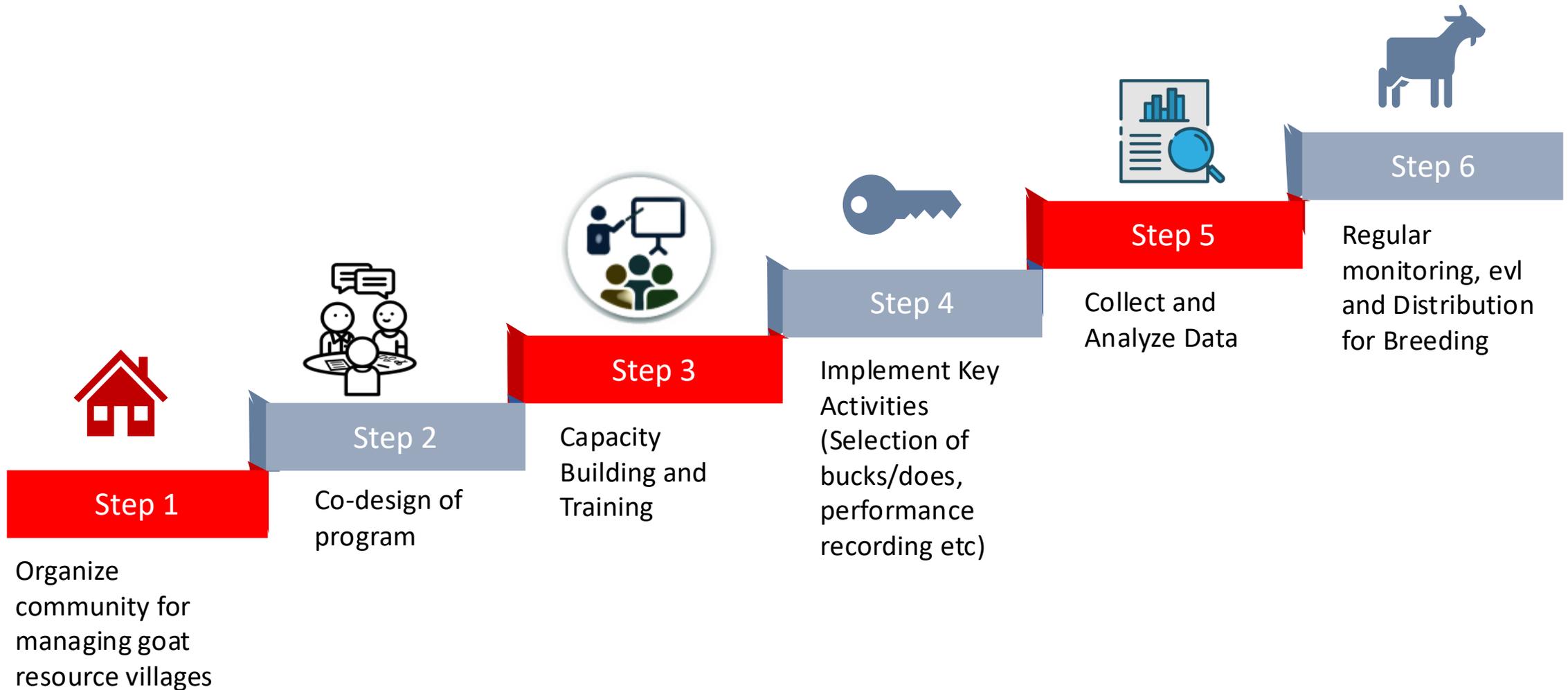
Practices of DDAE (contd.)

3. Community Initiated Genetic Goat Improvement Program (CIGIG) initiated by Heifer International -

- A **community-led program** to improve the **genetic quality of local goat breeds**
- Aims to enhance **productivity, income, and resilience** of smallholder goat farmers
- Promotes **sustainable breeding practices** –selective breeding
- Encourages **ownership and leadership** by the farming community



Steps of CIGIG



BauhaGumha, Tansen CIGIG Performance (368 HHs)

Seed buck	FY 78/79	FY 79/80	FY 80/81
No	203	120	198
Wt (kg)	6,432	3,598	6,763
Transaction (Rs)	4,127,950	2,255,675	4,095,000

Seed doe	FY 78/79	FY 79/80	FY 80/81
No	524	346	799
Total wt (kg)	9,443	6,777	15,569
Transaction (Rs)	3,490,265	2,603,210	6,449,150

Practices of DDAE (contd.)

4) Extension through Cooperatives -

- A model where **agricultural cooperatives serve as platforms** for delivering **extension services (business hub)**
- Leverages the **local resources and social capital** to **deliver services to more farmers effectively**
- Pull force to bring SHFs into the economic mainstream where **state and private sectors fail to deliver services**

Milansar SEW Coop, Tansen, Palpa

Estd: 2012 (with Heifer International support)



Organizational Structure of Milansar SEW Cooperative



Source: Milansar coop

Cooperative Capital

S N	Description	Initial Status	Current Status
1	Shareholders - no_	81	653
2	Share capital (NRS)	81,000	4,13,6200
3	Saving amount (NRS)	3,65,000	3,71,78,850
4	Reserv fund (NRS) =	4,88,248	40,49,040

Enterprises operated by Coop

1= Dairy

- Engaged HHs: 56
- Daily 150

2= Insurance

- HHS:300
- Goat: 495
- Large animal: 185

Coop Enterprises

3= Transportation—

- Livestock and Agri product
RS 464,280 (2080.81)

4.= Fertilizer

- HHS:252
- 615 bags (50 kg/bag)

Coop Enterprises (contd..)

5. Saving and credit

- HHS:653
- **Loan investment:
30,836,703**

6.FEED

HHS:300
480 bags (50 kg/bag)

Coop Enterprises

7=Goat

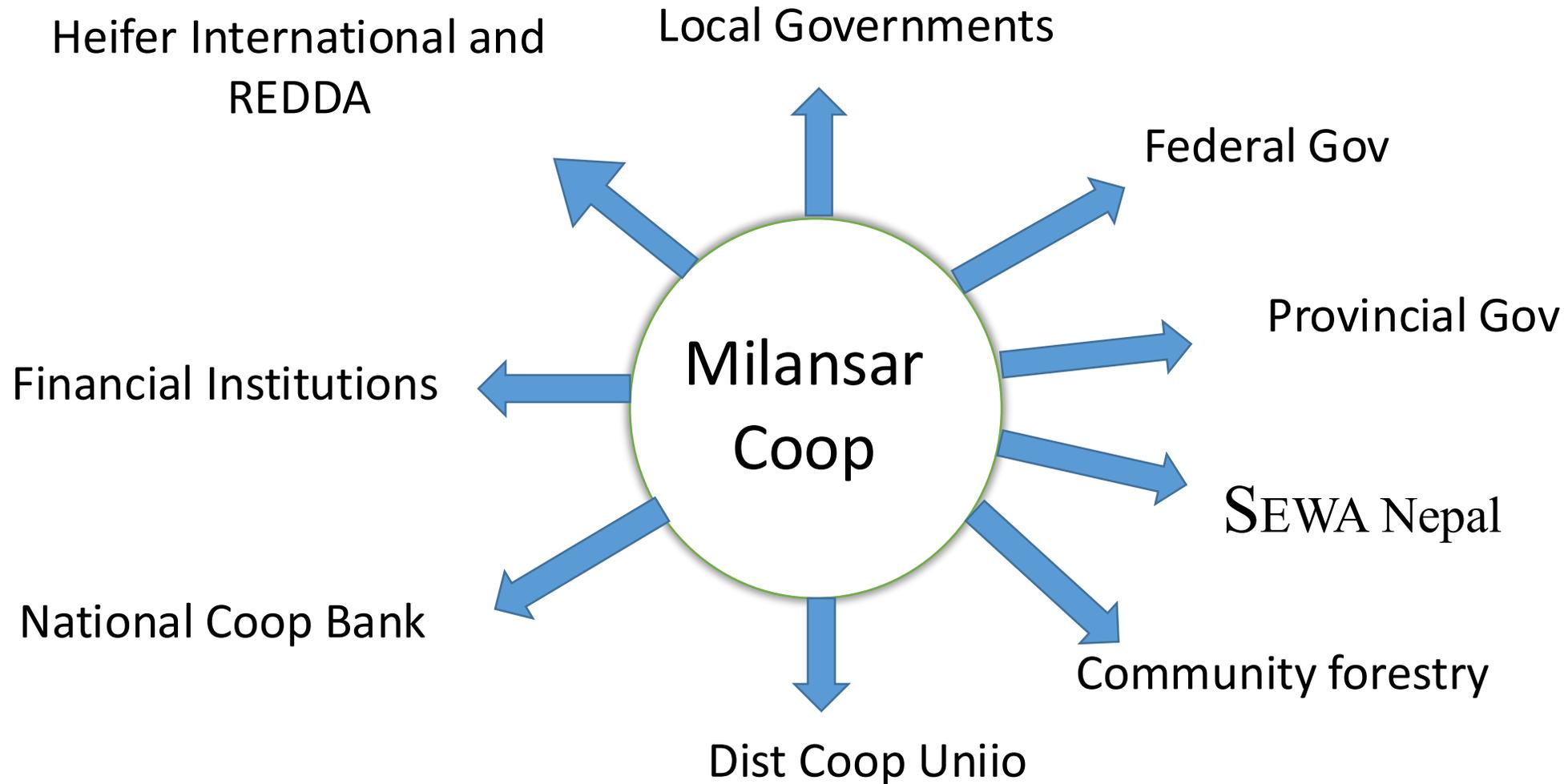
HHs: 518

- **Sale: 974 this yr**

8. Ginger—

Total sale : Rs 750,282

Coordination and LinkagesM



Source: Milansar coop

Challenges

- ❖ Time-consuming and resource-intensive initially
- ❖ Limited institutional capacity due to disruption in agri delivery system after federalism
- ❖ Broken research (NARC,univ), extension, farmer linkage
- ❖ Weak policy implementation
- ❖ Sustainability of funding and programs
- ❖ Traditional mindset (**we know everything, they know nothing**)

Suggestions

- ❖ Establish a legally mandated **Agri Development Council** at the municipality level for program design, monitoring, and evaluation, including reps from farmer groups, coops, NGOs, private sector, and government agencies
- ❖ Capacity building of extension workers as **Development brokers** (facilitators) and redefining their JD. Review and revise academic curriculum accordingly
- ❖ Reinstitute KGK as a **Nodal Point** for integrating NARC, Palikas, central government agencies, academia, and farmers
- ❖ Build the capacity of local governments in **Managing** agricultural extension (collaboration, partnership, quality assurance, coordination)

In Conclusion

- ❖ Demand-driven Agricultural extension can sustainably bring small and medium farmers into the economic mainstream
- ❖ Empowered farmers demand services
- ❖ Listening to farmers is the first step towards demand-driven extension

Thank you